Measuring Progress of Naftogaz's Organizational Transformation: "Isn't it too little, too late?"

Prepared by Market Research Unit of Naftogaz

I. Executive Summary

a) The purpose and sources of report

1. The purpose of this document is to assess a progress of organizational transformation of Naftogaz Group (hereafter Naftogaz, the Company, Naftogaz Group or the Group) initiated in May 2018, by doing that in an impartial, unbiased and objective manner, to the maximum extent possible. We've tried to make this assessment as an external observer, but taking into account insights based on available internal data.

2. According to par.2.2 of the Regulations on Naftogaz's Market Research Unit[1], one of this unit's functions is to monitor the implementation of Company's corporate strategy. In the broad sense, the ability of the Company's management to operationalize the Group's corporate strategy by implementing the organizational transformation is one of Naftogaz's key value drivers, that has to be monitored by the Market Research Unit[2]. Therefore, such kind of independent view on organizational transformation should help to maximize the Group's value either by way of a discovery of any potential issues with abovementioned abilities, or by providing insights on revealed external and internal limitations which should be additionally taken into account. We hope that this report will help to initiate open and constructive discussion on successes and failures of ongoing transformation. We encourage such discussion of analysis and conclusions of this report, hopefully in a collaborative manner. In particular, we are ready to reconsider the conclusions and reject formulated hypotheses, if it occurs that we have not taken into account any important pieces of information that we were not aware of when this report was prepared.

3. The report was prepared on the basis of open public data and assessment of the Group's operational environment by the team of the Market Research Unit, presentation from the first workshop on Naftogaz's organization transformation of May 2018, the transformation roadmap dated July 2018, the deliverables on transformation process received from the Department of Strategy of Naftogaz for the period from October 2018 until April 2019, information received during discussions with members of Naftogaz top team and Transformation Office (TO), key operational and financial data periodically monitored and/or received upon request by the Market Research Unit.

4. We describe our approach to the analysis of organizational transformation in Section II. Based on this approach, Section III provides a broad context of why it was critical to comply with originally

[1] Regulations on Naftogaz's Market Research Unit, approved by the Chairman of Naftogaz's Executive Board on August 1, 2016.
[2] According to par.3.2 of the Regulations on Naftogaz's Market Research Unit.

set deadlines, and further in Section IV we provide our assessment of Naftogaz's change process from different angles. The results of our research are formulated in Section I.c in the form of conclusions and several hypotheses, that should still be confirmed or rejected during further analysis. In the future we plan to continue such coverage and to provide periodic reviews of the status of organizational transformation at least on a quarterly basis.

b) Additional Disclosures

5. The analysis was prepared solely by a team of Naftogaz's Market Research Unit. The authors of this report[3] hereby certify that all of the views expressed here accurately reflect our personal views about the status of organizational transformation of Naftogaz Group. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific views or recommendations expressed in this report, but delivery of periodic (at least quarterly) reviews of the progress of organizational transformation is one of the indicators currently considered to measure the performance of Market Research Unit under OKR system.

6. The Market Research Unit reports directly to Yuriy Vitrenko, who currently holds a position of Managing Director of Naftogaz Group. Y.Vitrenko was accountable for the development and updates of Naftogaz Group's corporate strategy starting from 2014, and for the development of Naftogaz's organizational transformation in March-May 2018. In May-October 2018 he was responsible for the coordination of Naftogaz's units that were supposed to be helping Naftogaz's CEO[4] A.Kobolyev with the implementation of transformation roadmap (i.e. Department of Strategy of Naftogaz). In late October 2018 Y.Vitrenko had withdrawn from the involvement in those activities[5], reportedly because of his disagreement with A.Kobolyev on the approach to the organizational transformation. We are aware of this situation, and we've made our best to consider all relevant facts associated with that dispute by interviewing Y.Vitrenko, A.Kobolyev and other members of the top team, because this case also concerns the progress of Naftogaz's transformation. As a result of our analysis, the views expressed by analysts named in this report could be different from the view of Y.Vitrenko (even though we report to him).

7. Market Research Unit has also contributed to the organizational transformation process until mid-September 2018 by way of quantifying the value agenda and preparing some deliverables on transformation for Naftogaz's stakeholders[6]. Starting from October 2018 Market Research Unit has stopped participating in the development or updates of the corporate strategy of Naftogaz Group, except for providing long-term macroeconomic and pricing expectations, cost of capital calculation and participation in the development of strategy for gas transit business and arbitrations against Gazprom (two areas for which Y.Vitrenko is still de facto accountable).

[3] Oleksandr Vedenieiev, Olena Melnyk, Ivan Karpenko and Oleksandr Litvinov

[4] Though we use a notion of "CEO" in this report, in case of Naftogaz A.Kobolyev acts as a head of Executive Board, which is not the same thing.

[5] Officially the Department of Strategy of Naftogaz stopped to be accountable to Yuriy Vitrenko only from December 21, 2018, when a Resolution of Naftogaz's Executive Board No.425 was issued. It has not happened in late October 2018 because of a "clerical error" in earlier Resolution of the Executive Board.

[6] E.g., a presentation on Naftogaz's strategy and transformation to the Supervisory Board of Naftogaz as of September 17, 2018, jointly prepared with a Department of Strategy of Naftogaz

c) Key conclusions

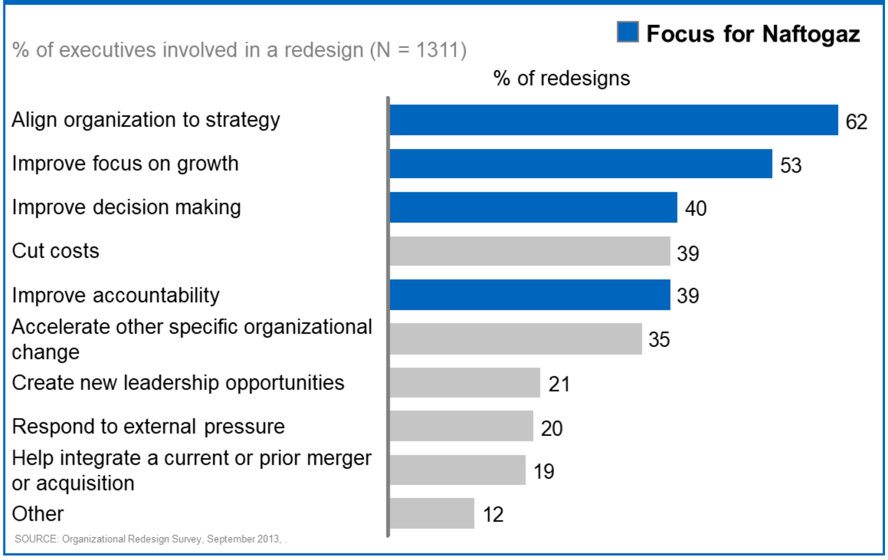
8. To draw conclusions from our analysis, we start by answering the question *"Whether transformation's goal on adapting the Group to challenges of 2019 was successful or not?"* Based on data provided in Section IV.a, our conclusion is that this goal was not reached. As of the beginning of 2019 it was not possible to position Naftogaz as a redesigned company with strong team of professionals undergoing a change journey (see paragraph 68), and disappointing results of public opinion poll on attitude to Naftogaz as of Mar'19 additionally prove that (see paragraphs 37-39). Our view is that it is not possible to position Naftogaz as such company even now.

9. That conclusion leads us to the next question of *"What is the current status of transformation?"* Based on data to which we had access at the date of this report and taking into account analysis in Tables 1-4, our view is that transformation is significantly behind the schedule, making Naftogaz vulnerable to short- and medium-term threats and challenges described in Section III. Based on the approved business plans and taking into account financial and operational results of Naftogaz Group in H1'19 we see high risks that Naftogaz in its current scope will face a solid operational cash deficit in 2020 without gas transit revenues. In view of these challenges, marginal progress of transformation poses a high risk of disintegration of Naftogaz – because even new Government will eventually stop understanding what value proposition current Naftogaz's management could deliver (except for 'negative assurance' in respect of minimization of corruption) and why the Government should cover possible cash deficit next year. More broadly, in the medium term this situation creates a risk of losing possibility to use Naftogaz as a platform for Ukrainian gas market transformation.

10. In this respect we also recall the original workshop on transformation in May 2018, where the focus of Naftogaz's redesign was formulated (see Figure 1 below). Bearing this in mind, we can hardly say that organization has achieved an alignment on strategy (e.g. see paragraph 16, Figure 17, Section IV.b), focus on growth and significant improvement of accountability for the maximization of Company's value (see paragraphs 54-58, 81). Though with a creation of new "divisions" there should be an improvement in decision making and personal accountability, it should still be tested if tangible business results will be delivered with a chosen design – as of today we cannot say that existing achievements are solid and remarkable (see Sections IV.e - IV.f), and some operational results show high risks of further worsening (e.g. in gas production). Many our interviewees are also concerned that CEO's behavior deviates from the originally discussed principle of following pre-agreed standards, practices and policies – instead of that, manual interference from the CEO is usual, being an example of what we call a "fatal conceit"[7]. If such behavior continues to exist, it would be very hard to nurture personal accountability of business leaders.

[7] During our interviews we've also discovered that CEO provides each member of the top team with different level of "autonomy", meaning that the level of this autonomy for different leaders depends on the level of CEO's trust instead of policies and guidelines.

Figure 1. Objectives of organizational redesign

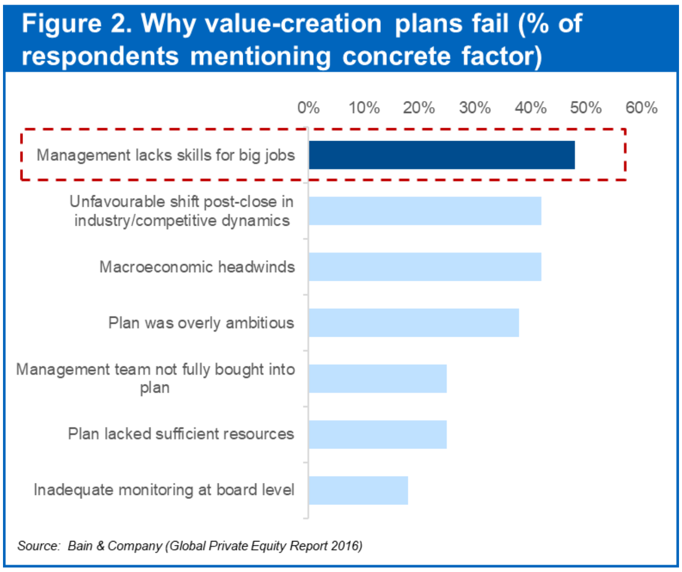


11. We are also concerned that Naftogaz may be losing its originally expected focus on *value creation*. For example, currently developed OKR system deviates from the original principle, when end-to-end ownership for distinct value chains and remuneration based on creating or enabling value maximize accountability for results. As a result, we see problems with maximization of value as a guiding principle of management decisions, and we've described several relevant cases in this report.

12. Returning to the matter of original principles of transformation, we have observed disturbing cases when *violation of declared "non-negotiables" of Naftogaz* is accepted and not punished on the level of the top team and below. Though there are cases when we've observed the opposite behavior (when people were punished for non-compliance with agreed principles), the importance of zero tolerance to violations of non-negotiables cannot be overstated. Only true living of Naftogaz values without double standards will help to substantially develop an effective role model for its employees, when they translate declared Naftogaz's core values into what they do on a day-to-day basis. Without it the change is not possible, the risk of "extend-pretend" or "status quo" scenario significantly increases, and the path forward becomes not clear.

13. As we discuss in details in paragraph 69, we have the following not mutually exclusive hypotheses on the reasons behind lagging transformation and abovementioned deviations from its original design principles:

    a) **Requirements of holistic transformation of such important NOC as Naftogaz (contributing more than 6% of Ukraine's GDP) does not match with experience and competencies of current Naftogaz's management team**. For example, it was disturbing that one of our interviewees was very skeptical about managerial abilities of the current top management given that even CEO shows no understanding of such important element as adequate compensation system for the top team.



b) **CEO's was reluctant to 'rock the boat' and pursue radical changes in Naftogaz** in view of toxic attitude of shareholders, problems with engagement of ultimate beneficiaries (people of Ukraine) and fear to disrupt operational activities. For example, A.Kobolyev was reluctant to make changes in the top team – as a result, this created a kind of 'domino effect' for some essential workstreams for Naftogaz's change.

c) **Supervisory Board is not ready to hold CEO accountable for the non-delivery of tangible results of organizational transformation**. As we also describe in the report, there are legitimate concerns that there are no professionals with technical skills or representatives with experience in rigorous organizational transformations in Naftogaz's Supervisory Board. As a result, there is no adequate system of 'checks and balances' on the level between Supervisory Board and Executive Board.

d) **Ability of external strategic management consultants** to drive key workstreams was overestimated.

e) **There was no real alignment in management's view** on the principles of Naftogaz's transformation.

f) CEO may have delegated **too many responsibilities to the Naftogaz's Department of Strategy** – as a result, **TO was overwhelmed with other tasks**.

g) **Initial hypothesis on value agenda was not accurate** and it was developed based on "top-down" approach. As a result, clarification and commitment to deliver this agenda by business leaders "from the bottom" took longer than expected.

14. In respect of further way forward, we do not feel legitimate to provide any recommendations on what should be done with Naftogaz's change journey at the moment, given that we do not possess enough experience in respect of successful transformations' implementations. But we are concerned about talks that CEO is going to hire new Chief Operating Officer and make him responsible for the transformation. First, we understand that potential candidate for this role is a non-resident who does not understand Ukrainian realities yet (and it would take significant time for him to learn the ropes). Second, as we've mentioned in paragraph 17, the chosen way of transformation's implementation has to be based on the existing cultural features and hierarchical

management in the Group – for us it's hard to imagine that new COO will have enough authority to implement transformation.

II. Original goals of organizational transformation and our approach to the analysis of its progress

15. In May 2018 a workshop with Naftogaz's top management team commenced, and it was declared there that "*Naftogaz has embarked on a transformation journey*". The original idea behind Naftogaz's transformation was to implement the ambitious corporate strategy (developed in 2017) by changing the Group's operating model. In short, Naftogaz was supposed to become "*a performance driven organization with the objectives of strengthening personal accountability, improving operational efficiency, capturing synergies from being horizontally and vertically integrated, strengthening the corporate governance, identifying, assigning and operationalizing the critical roles that drive most of Naftogaz' value agenda*"[8].

16. That being said, we note that our recent interviews with a top team had shown no alignment in the understanding of primary transformation's goal. In particular, Y.Vitrenko told us that the first and foremost goal was to swiftly transform Naftogaz into the efficient company with checks and balances, minimizing the dependence of Company's development from concrete personalities. On the other side, A.Kobolyev has told us that (a) it was not the first priority of transformation and he was not aware of such idea, (b) the key objective was to swiftly achieve a financial sustainability of Naftogaz with ROIC>WACC. Given that Y.Vitrenko was developing transformation from its start and A.Kobolyev was responsible for its implementation, we consider such difference of opinions (presumably existent even in April 2018) as a disruptive and hidden conflict that became apparent in October 2018[9]. In this respect we recall a workshop in May 2018 where McKinsey's team communicated that transformation is "*a rigorous process, and <u>you need to start with a clear aspiration</u> of where you're headed and why*". There is also another explanation of such difference in opinions: CEO may currently use the abovementioned interpretation because he can, intentionally or irrationally, look for excuses for lagging transformation – meaning that he can blame external political factors for not achieving the first priority of transformation if such goal was just "ROIC>WACC". In this respect we should note that in all key documents that we were provided with, indicate that the priority for transformation was closer to what Y.Vitrenko is saying (see, for example, a quote in the paragraph 15 above)[10].

17. Our review showed that the chosen transition operating model ("strategic controller") and the way of transformation's implementation (leading role of CEO) had to be based on the existing cultural features and management style in the Group – but these features were also expected to be transformed during this process. Specifically, the real change for Naftogaz was expected to be the

[8] Quote from the title page of presentation on Naftogaz's organizational transformation roadmap as of June 2018.

[9] To some extent, such difference in opinions reflects the conflict between protagonists and antagonists of "*The ends justify the means*" principle. Our understanding is that Y.Vitrenko was focused on the "means", with little tolerance to the deviation from the chosen principles of transformation, while A.Kobolyev's attitude towards chosen "means" was more flexible. As we further describe in this report, another appropriate analogy in this case is the difference between schools of economic growth, with institutionalists on the one side and supporters of "Asian model" based on strong leadership on the other side (we should disclose that the authors of this reports support the former school).

[10] NB: according to our interview with Y.Vitrenko, both he and A.Kobolyev understood in 2018 that it was not possible to achieve ROIC>WACC without operationalizing the critical roles with the new team, therefore such operationalization had to come first.

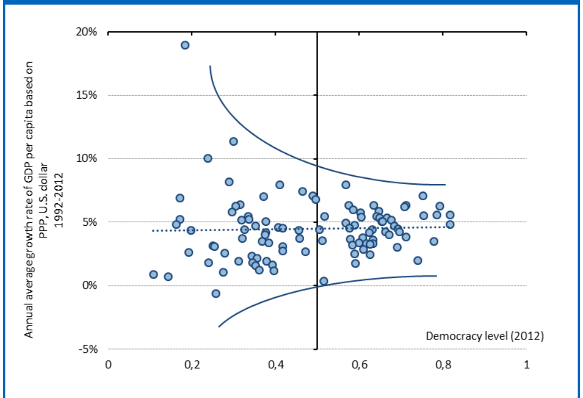
metamorphosis from a **"top-down hierarchical rule"** with undeveloped checks and balances to a "**rule of law"** under a professional open-minded management team, with the checks and balances built in by way of implementation of new systems and processes. The former situation ("hierarchical rule") was and is quite prevalent in large Ukrainian SOEs, formed under a planned economy. However, that style of organization is a real detriment to the development of a company in a market economy.

18. In this context, the organizational transformation of Naftogaz was comparable with the implementation of market reforms in an authoritarian economy:

    (a) the process should have been leaded by a key person (Head of Executive Board in case of Naftogaz);
    (b) a lot starts to depend on this person's capability to achieve success by leveraging the power of hierarchy and to "release" his economic powers to relevant institutions;
    (c) the success is possible only in case of this leader's stickiness to the original principles of market reforms, and advisors with adequate skills and experience help him to achieve transformation's goal.

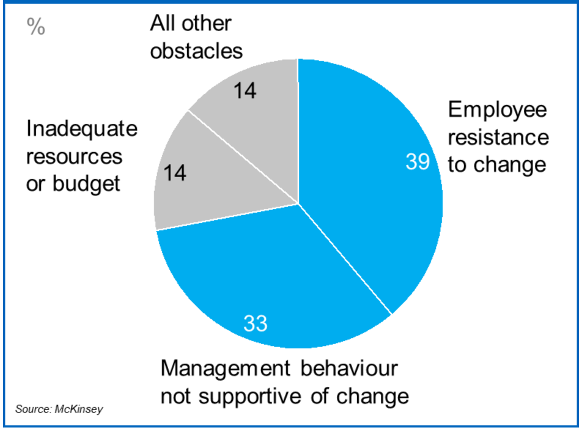
19. Elaborating on that analogy, the evidence suggests that autocratic approach to economic reforms does not have advantages over reforms in democratic societies, but it results only in greater variance of results[11] and, therefore, greater tail risks for the transformation (see Figure 3 below). We can't say that transformation of Naftogaz, the largest Ukrainian group of companies by assets, which contributes 6% to GDP, was no less complicated in comparison with market reforms in a small authoritarian economy. In case of Naftogaz it was even more challenging: the transformation was initiated from the top and there was no clear demand for and support of this process from the employees, whereas in transformations of authoritarian regimes in different countries the situation is usually the opposite.

Figure 3. Autocracies lead to higher variation of economic results



Source: The Economist Intelligence Unit, IMF

Figure 4. Factors contributing to failure of transformation

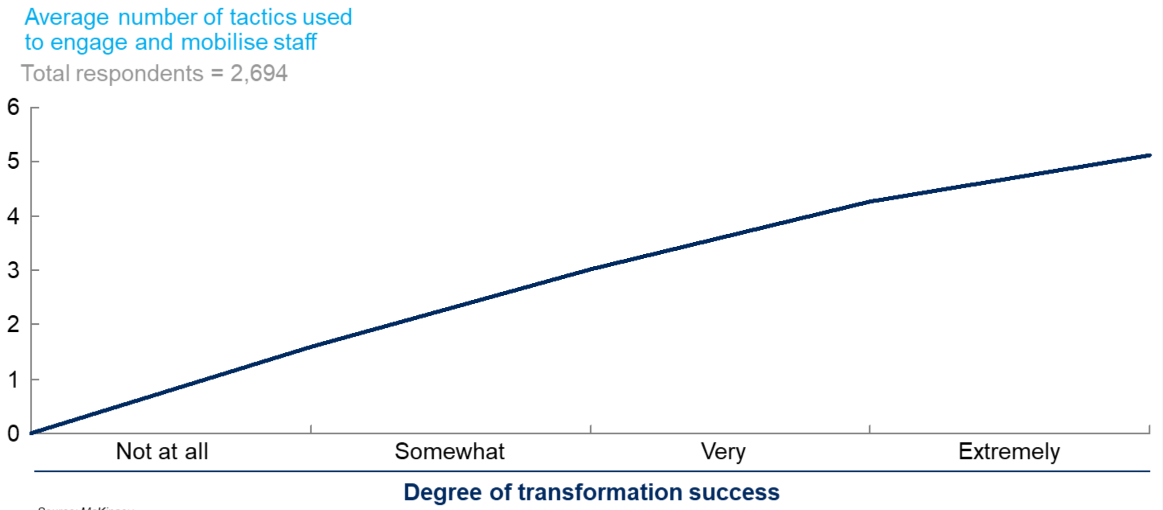


Source: McKinsey

[11] There is a usual misconception in Ukraine about favorable role played by autocratic approach to economic reforms implementation (many people consider Lee Kuan Yew as a perfect example). However, thesis about a positive role of the autocracy of political regime in achieving sustainable high economic growth rates is not supported by the facts. Research shows that autocratic approach to economic policy does not have advantages over democracy and market-oriented economic policy. Autocracy of economic policy results only in greater variance of results. In other words, history shows that autocratic economic policy may be compared with a kind of lottery, that can bring results either like in Singapore or like in Zimbabwe. More details regarding influence of such economic policy on economic growth could be found in William Easterly's "Benevolent Autocrats", 2011.

20. Having said that, we note that at the outset of organizational transformation its reliance on management's behavior and employee's engagement was pushed to the limits in Naftogaz's case. Even in common cases 77% of change efforts fail, and, as shown in Figure 4, out of change programs that fail more than 70% of those failures can be traced to the situations, where employees aren't engaged (because people haven't bought into the change) and management deviates from agreed agenda. It was critical if not essential to change people and culture, behaviors, beliefs and deeply engrained habits of old hierarchical structure – at least in spring and summer of 2018 it was understood to be a tough task and one of the priorities for a change.

Figure 5. With more motivated, excited and engaged people it is more likely that transformation program will succeed



Source: McKinsey

21. So already from the beginning the odds were stacked against successful transformation. And a big part of Naftogaz's transformation journey should have been completed before the end of 2018. By that time both N-1, N-2 and N-3 management levels were expected to be made operational based on the new organizational structure with:

- developed principles for core processes;
- a performance management system for 100 critical roles (in compliance with agreed corporate strategy and corresponding value agenda);
- a launch of large-scale procurements of systems to close critical gaps with peers;
- an implementation of initiatives to improve Naftogaz's organizational health and to engage its key stakeholders into the "transformation journey".

22. It was essential to complete these steps before 2019 to be ready for political risks of that year and to start mitigating existing failures in key Naftogaz's markets by leveraging strengths of new operating model (see Section III below). The Company was positioned as "New Naftogaz" from 2014 – but it was critical to restructure and start positioning it as "Redesigned and Strong Naftogaz"

by early 2019. Such schedule was estimated as realistic at that time[12], and we'll return to this point later in the report.

23. Our interview with A.Kobolyev revealed that currently CEO disagrees with the original hypothesis of Y.Vitrenko about the expected improvement in Naftogaz's public recognition through positioning it as a modern company with ROIC>WACC. A.Kobolyev said, that such recognition could have been enhanced by the improvement of stuff that was more obvious for ordinary people and politicians (e.g. service quality and price, higher net profit, lower expenditures on subsidies). We do not disagree with the importance of such things, but it must be said that the engagement of ordinary people by developing Naftogaz's narrative, improvement in quality of services with direct supplies to households and switch to value-oriented mindset (that correlates with the maximization of net profit) were envisaged in the original design of transformation. Therefore, we do not agree with CEO's positon that "obvious things" were originally neglected when transformation and, particularly, principles of engagement campaign for 2019 were designed (see also paragraph 29). Finally, such current CEO's view may be explained by the possible search for excuses described in paragraph 16 above.

Figure 6.Transformation program was expected to take 2-3 years



24. On top of conformity with initial deadlines it is also critical to see whether original design principles are met in the process of transformation. As mentioned above in paragraphs 19-20, a lot depends on the management's stickiness to the agreed principles of change process, and any deviations from that could also be detected by monitoring approaches to everyday Group's operations. Therefore, we measure the success of organizational transformation from the following angles:

A. **Meeting the original timeline.**

B. **Conformity of management's decisions with the original non-negotiables of transformation**. Leading the change means that senior executives must be not only "on top" of the change

[12] At least, we have not found any objections to the deadlines of that schedule as of summer 2018.

program, but also "in front," modeling the new behaviors they are asking of their people and holding one another accountable for their successful adoption. So, for instance, when executives talk about openness, they must demonstrate through their example what adherence to such principle means.

C. **Conformity of approved business plans with the original principles of transformation**. Business plans can reveal what business leaders responsible for their development and implementation truly care about.

D. **Approach to the organization of transformation process and evaluation of progress of Naftogaz's change journey.** As evidence suggests, successful transformations invest in a rigorous, fact-based diagnostic of their performance. Therefore, we have looked at how such diagnostic of transformation progress is organized in Naftogaz. We have also looked at how organization of transformation process was structured, because this issue was raised by almost all members of the top team whom we've interviewed.

E. **Assessment of quantitative operational results** to see if there are tangible "success stories" of organizational transformation. As literature says, many change management practitioners measure activities such as the number of communication sessions held or the number of individuals trained, but transformation is not in itself a goal or a 'cargo cult'. As said above, the idea was to create a model that should help to implement the ambitious corporate strategy of Naftogaz, so we've made an assessment of whether quantitative benefits expected from a change have started to be realized.

F. **Assessment of qualitative indicators** of organizational transformation. It was decided in summer 2018 that key gaps versus best practices should be identified in Naftogaz and high-level plan to close these gaps should be developed. We have tried to estimate whether these gaps are narrowed by using an assessment of selected Naftogaz's principal activities and corporate functions (in comparison with leading practices) made in September 2018 and updated assessment made by us as of June 2019.

25. We cover each of these topics in the sections below, providing more detailed case studies where they are relevant. But before that in the next section we provide a broad context of transformation to describe why it was essential to change Naftogaz in a rapid manner using holistic comprehensive approach.

III. Why holistic and rapid transformation was important?

a. What challenges Naftogaz faced when transformation started.

26. As mentioned above, it was expected that transformation will lead to tangible results already by the end of 2018. For the purpose of our analysis it is important to understand why such timeframe was set in May 2018, and what the expected consequences of deviation from these deadlines were.

27. When Corporate strategy and Synergies projects were realized with McKinsey, it was confirmed that Naftogaz faced market failures in all of its key business segments. Consolidated 2017 results showed that Group's returns were below the cost of capital because of hidden subsidies and unsustainable business model with high transactions costs (see Figure 7 below). A set of other problems were also on the table:
    - Failures on gas production targets have started to be observable from the middle of 2018.
    - Problems in procurement and attracting international partners in gas upstream.
    - Lack of proper integration with subsidiaries.
    - Obsolete processes and systems.
    - Deficient culture that was far from a modern company.
    - Lack of integrity at Ukrnafta.

Figure 7. Naftogaz's business perspective at the start of transformation

Not financially sustainable way:
- Return on Invested Capital (ROIC) is less than Opportunity Cost of Capital (OCC)

Key markets are not efficient:
- prohibitive transaction costs

Key end-consumers for Naftogaz' products:
- Gazprom
- Ukrainian residential segment
- Industrial gas consumers
- Russian oil companies

Legend: ● High transaction costs; ● Moderate transaction costs; ● Low transaction costs

	Key Segments (as disclosed in 2017 Financial Statements)	Volumes (2017), bcm	Revenues, Bn UAH	OCF, Bn UAH	ROIC %	OCC %	Transaction costs[2]
Gas segments	Gas production, import and sales to RSC's for resale to households	11,0	54,3	11,2	4,5	18,7	High
	Gas production, imports and supply to MHE's for the needs of households	4,6	22,8	1,2	3,0	18,7	High
	Gas production, imports and supply to other customers under PSO	1,2	7,8	2,3	8,7	18,7	High
	Gas imports and supply to other customers outside PSO	0,6	4,1	2,8	11,2[1]	13,4[1]	Low
	Gas transit	93,5	73,9	38,3	3,0[1]	11,9[1]	High
	Gas domestic transmission	27,4	24,8	(4,9)	0,01[1]	11,9[1]	Moderate
	Gas storage	2,5	0,2	0,4	(0,4)[1]	11,9[1]	Moderate

	Key Segments (as disclosed in 2017 Financial Statements)	Volumes (2017), mln t	Revenues, Bn UAH	OCF, Bn UAH	ROIC, %	OCC, %	Transaction costs[2]
Oil value chain	Petroleum product sales	1,1	18,1	1,6	12,7	19,7	Low
	Oil and Gas condensate	1,3	12,9	1,6	16,6	22,0	Moderate
	Oil transit	13,9	3,6	1,4	19,9	17,4	Moderate
	Oil domestic transmission	1,7	0,2	(0,2)	(6,3)	17,4	Moderate

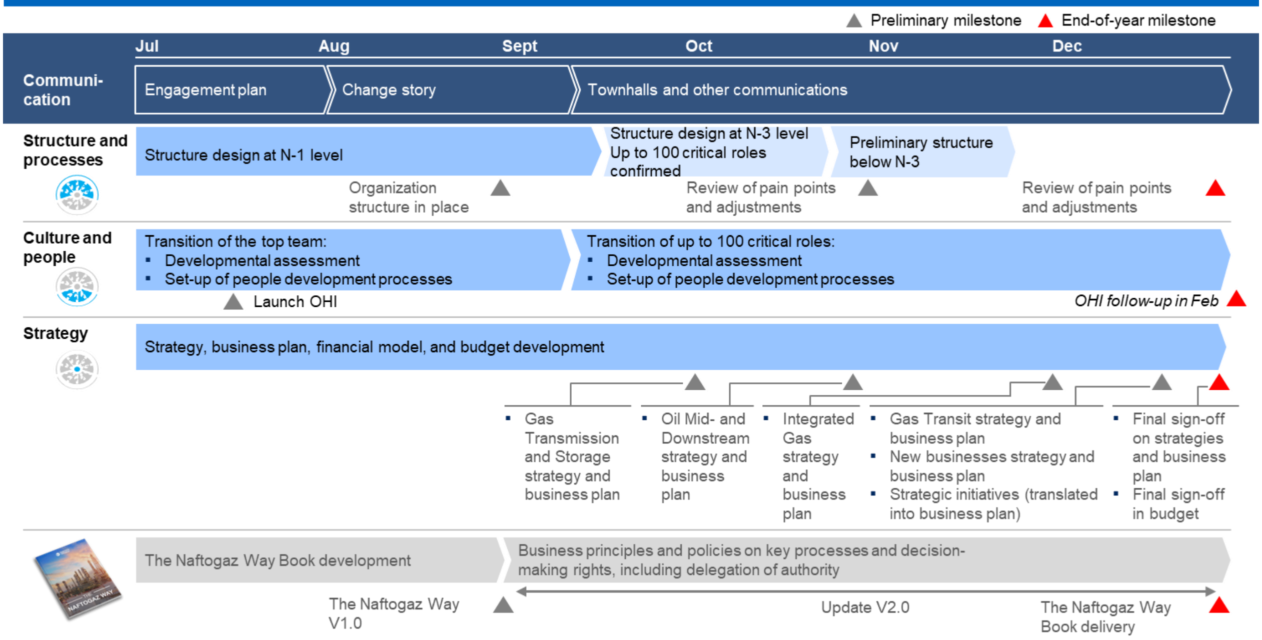
1 USD-denominated ROIC
2 Transaction costs refer to the cost of providing for good or service through the market rather than having it provided from within NG; it relates to the risks of counterparties and reflects possibility of market failure

28. The management has also understood a bundle of external threats:
    - Neo-imperial policy of Russia translated into hostile behavior of Gazprom, including a threat of zero transit beyond 2019.
    - Problems with the rule of law, transparency and integrity on domestic gas market were accumulating. Corrupted and "post-soviet" values of political elites impeded transformation of Naftogaz's business model (political meddling and graft, "natural right" to regulate gas prices etc.)
    - Limited engagement of key stakeholders, with inadequate appreciation of company's successes.
    - Arrival of more antagonistic elites in 2019 Presidential and Parliamentary elections could have led to fast disintegration of Naftogaz.

29. Given the unsustainable business model and abovementioned risks it was decided that Naftogaz should show significant results in its transformation already by the end of 2018. Operationalization of the adapted professional team with engagement of people, change of culture, improvement in processes and systems, accountability for signed-off business plans should have provided a possibility to position Naftogaz as a redesigned and strong company, that will end its transformation journey to becoming a successful world-class company in the next two years. Such positioning was expected to be made by delivering Naftogaz's change story in its Annual Report for 2018, developing strategic narrative communication, branding and marketing of Naftogaz as a reputable, modern and secure energy supplier that "brings warm into people's houses". For example, to show a progress in "People and Culture" workstream it was planned to hold two OHI[13] surveys – in July 2018 and in February 2019 – to show a progress in Naftogaz's organizational health in the Annual Report.

30. On top of that, 'The Naftogaz Way' playbook should have been released by December 2018, describing new internal "rule of law" for the Group: key activities, business principles and policies on key processes and decision-making rights, including delegation of authority. Its purpose was both to promote role-modeling, fostering understanding and conviction of Naftogaz's employees, and to raise compassion and empathy of those external stakeholders to whom the book had to be provided.

Figure 8. High-level transformation roadmap for July-December 2018 (approved in July 2018)



31. This holistic approach should have significantly improved the engagement of key stakeholders (people of Ukraine as consumers and owners, employees) already by the end of the first half of 2019. Such change in people's mindset was supposed to provide Naftogaz with a "shield" from domestic political threats, and possibility to keep going with the implementation of its corporate strategy on a solid basis. Having said that, we should cover the questions of whether Naftogaz's

[13] Organizational Health Index

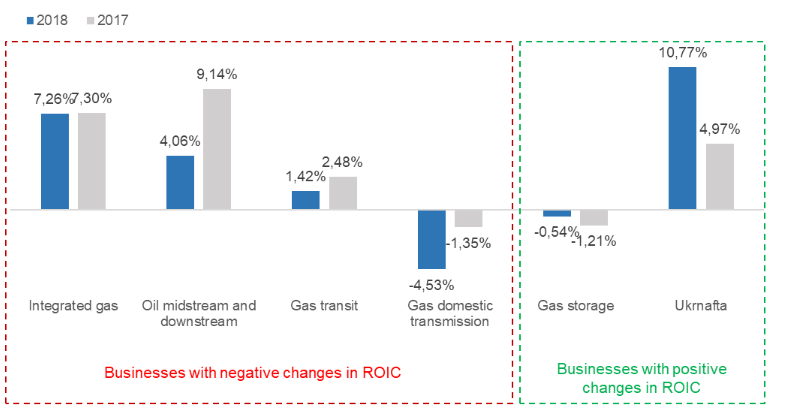
expectations were too pessimistic, and whether it was/is allowable to postpone organizational transformation of the Company.

b. Current challenges faced by Naftogaz

32. Existing data suggests that almost all of the challenges and threats listed above still exist. And in some areas the situation has become even worse. In particular:

a) According to 2018 consolidated results and our calculations, **return on capital (ROIC) is still below opportunity cost of capital**. Moreover, there was a decrease in ROIC of key Naftogaz's businesses (see Figure 9 below), suggesting that the urgency of transition from *value destruction* to *value creation* for Naftogaz became more pronounced.

Figure 9. ROIC of key Naftogaz's businesses



Source: Naftogaz's IFRS Consolidated Financial Statements for 2018, calculations by Naftogaz Research

b) Russia is setting out **unacceptable conditions for continuing gas transit** in 2020, while concurrently finishing the construction of the Nord Stream 2 pipeline which will allow it to bypass Ukraine. No revenues from transit means GDP declining by approximately 4%[14]. The IMF currently expects Ukraine's GDP to grow by 3% in 2020; deducting those 4% will result in a recession and GDP decline by 1%.

c) Zero physical transit volumes could lead to **gas shortages in Ukraine as soon as this coming winter**. Since Ukraine will no longer be important for Europe as a gas transit route, such gas shortages will no longer be seen as a threat to gas supplies to Europe. This can undermine the potential for help being provided to Ukraine by its international partners[15].

d) If **"inadequate" approach of the Government to the unbundling of TSO** based on OU model continues, it will destroy up to USD 14.8 bn claim of Naftogaz, and Gazprom will be provided with an opportunity to claim USD 3 bn from Naftogaz. As a result, Ukraine will not receive compensation for the decrease in value of GTS caused by zero transit.

e) The **sector is basically closed to new entrants from leading international oil and gas companies** that would be able to bring new technologies and investments. For example, they did not

[14] Including the effect from GDP multiplier.
[15] During winter season of 2014-2015 international partners's help allowed Naftogaz to achieve reliable supplies

participate in new auctions for production licenses[16], and there was not a single bidder at many auction lots.

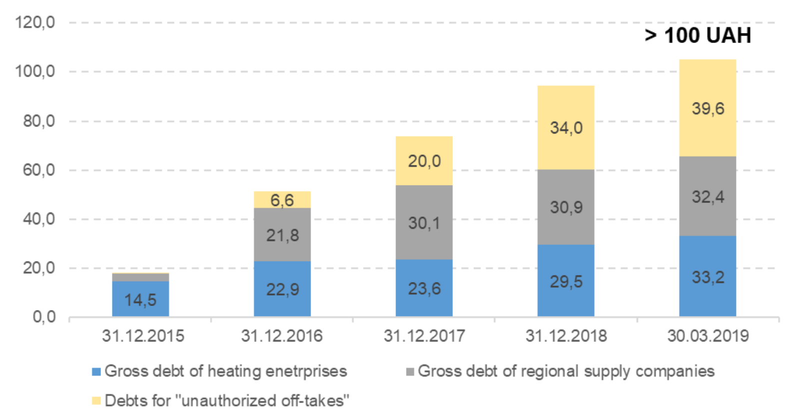
f) So far, **advances in energy efficiency are only happening as a result of price shocks** – when people become concerned that they will have to pay much more. Loan programs and donor projects are having a relatively limited effect. The negative effect from the obsolescence of infrastructure is far larger, and the positive effect from the monetization of subsidies is still questionable.

g) The **process of reforming the gas market in the past several years can be described as "one step forward, two steps back"**. The government has promised the IMF that the market would be fully liberalized starting from April 1, 2020, but the necessary preparations have not been made, and thus there is a high risk of it being postponed for the third time[17].

h) There is **very little support for gas market reform among the general population**, mostly because of the way the government has communicated it to the public as well as because of intentional disinformation on the part of reform's opponents. Among these opponents are Russia, together with its agents of influence, as well as Dmytro Firtash's oligarchic group which also has ties to Russia.

i) **Issues of gas theft and leakage**, as well as with proper accounting for volumes off-taken, remain unsolved. More than UAH 40 bn are accumulated as debts for unauthorized off-takes on Naftogaz's accounts.

Figure 10. Debt accumulated on Naftogaz's accounts, UAH bn



Source: Naftogaz's Consolidated Financial Statements (IFRS)

j) The Constitutional Court of Ukraine recognized that **Ukrainian Energy Regulator (NEURC) was created in an unconstitutional way**, which makes questionable the legitimacy of past decisions of NEURC and creates problems for future Regulator's decisions. Given that NEURC already had problems with trust in its independence and competence, such disruption makes problems with already fragile "rule of law" even worse. Much remains to be done by this or

[16] Some international companies have submitted their bids in PSA tenders, but: (a) when results of these tenders were announced, it was clear that some tenders were won by companies associated with local "business partners" of government officials; (b) in our opinion, international companies that submitted their bids are not the leading ones. For example, daily production of Vermilion Energy (who submitted their bid together with Ukrgazvydobuvannya) in Q4'18 was 16 million m3 in gas equivalent, 2.6x lower than daily production of Ukrgazvydobuvannya.
[17] In 2015, the Government promised to complete the liberalisation by 2018, then the deadline was pushed back to 2019, and then to 2020.

new Regulator in order to complete the reforms, including bringing secondary regulatory acts in line with European rules, creating a new infrastructure for managing credit risks, revising tariffs for regional distribution companies.

k) The government still **selectively applies the European rules transposed into Ukrainian legislation** with the adoption of the Law on the Natural Gas Market in 2015, specifically by ignoring the provision on compensating the Company for the public service obligations (PSO) imposed on it. Such approach unbalances the market, as well as discredits the reforms.

l) There is a risk that **the situation with interconnectors from Europe might worsen**, which will mean new bottlenecks in diversifying gas supplies.

33. Given these trends, without receiving compensation from Gazprom (which is not expected at least until the second half of 2020), it is highly probable that Naftogaz in its current consolidation scope and without changes expected from transformation will not only stop being the largest *net contributor* to the state budget, but will go back to the status of *net recipient*.

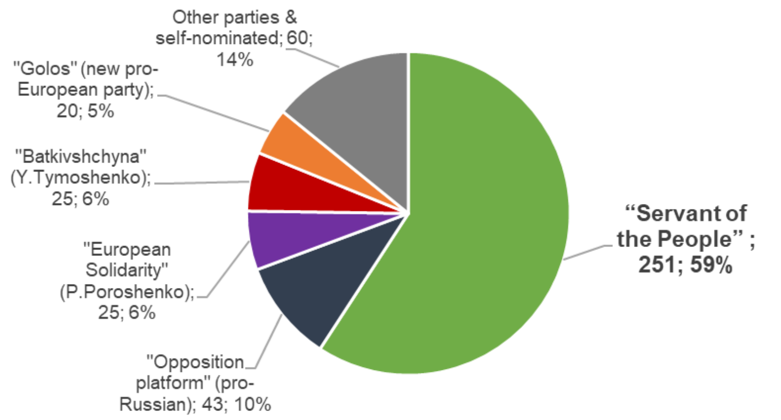
34. As regards political risks, one can say that Naftogaz has avoided a major risk of recent Presidential elections – in particular, because of the failure of Y.Tymoshenko, who was considered as the worst candidate from Naftogaz's future perspective. But we do not think that the story ends here:

1) **Relations between current Government and Naftogaz are more than toxic**, there is no mutual trust or, sometimes, even respect. The Government has also set de facto unrealistic targets for the current Naftogaz's CEO for 2019 – given that organizational transformation significantly depends on him as a key person (as described above), such situation poses risks for successful transformation of Naftogaz. As we also understood from our interviews with top management team, (a) when in February 2019 it was not clear whether the new contract with the current CEO of Naftogaz will be signed, there was an interruption in "People and Culture" workstream, particularly in the development of performance management system – there was no progress in this area until June 2019; (b) contract with a candidate for one of the key N-1 role was not signed in the beginning of this year because of the same reason. Given the unrealistic targets for the current Naftogaz's CEO, we see risks of another delays in transformation process, if the same situation about the uncertainty about his contract occurs by the end of 2019. During our interview with A.Kobolyev he clearly pronounced that he does not see any reasons to continue Naftogaz's transformation if the same Government or the same relations with the new Government persist (according to him, Naftogaz will roll back to the Soviet-style organization in such case, because most of current management team will leave the company).

2) Preliminary results as of July 22, 2019 show that the party of new President ("Servant of the People") has won a majority in the Parliament in early elections. Political observers say that the composition of the party list of "Servant of the People" leads to **high risks of possible bribery of some elected MPs by Russian agents of influence and/or oligarchic groups** with aggressive attitude towards Naftogaz.

3) This party could also consider the coalition with Y.Tymoshenko's "Batkivshchyna" party or even with pro-Russian opposition. Though we consider the second option as very unlikely[18], both options pose **risks to Naftogaz from the side of new coalition Government (if there will be a coalition)**[19].

Figure 11. Composition of the Parliament based on preliminary results of elections (as of July 22, 2019)



Source: The Central Election Commission of Ukraine

35. In terms of politics, our understanding is that during a crisis situation with Mr.Kobolyev's contract in February-March 2019 the current CEO was personally backed by international partners of Naftogaz (in particular, the US), and it was the main if not the only reason why the Prime-Minister has agreed to sign a contract with him[20]. In our view, this situation created possibility for two opposite but dangerous scenarios:

- On the one side, such *vote of confidence* puts additional pressure on Naftogaz's CEO to demonstrate solid results of transformation, but it also creates risks of losing support for Naftogaz's current management if the results of transformation will be too disappointing[21]. Given that international backing was critical during all major Naftogaz's crises starting from 2014[22], and given that the support of some Western partners is already questionable[23], if abovementioned risk is realized and there will be no radical changes in the composition of the Government (or Government's approach to Naftogaz's assets), the consequences for Naftogaz and Ukrainian gas market could be severe if not devastating. Naftogaz could be disintegrated as some agents of influence and even government officials still wish, and Ukraine will lose the opportunity to extract value from Naftogaz's transition into modern National Oil Company (NOC).

[18] For example, it is expected that "Servant of the People" will try not to lose its popularity because of future 2020 local municipal elections – therefore, collaborating with pro-Russian party could have little benefits for the "Servant of the People".
[19] https://www.pravda.com.ua/news/2018/09/28/7193511/
[20] It was also confirmed during interviews with top management team
[21] And/or if there will be signs of non-conformity with Western values (such possibility exists, as we describe below in the progress of transformation). If this risk is realized, we think that international stakeholders could be indifferent as to what team they will support – the current one or a new one, that could be proposed by government officials.
[22] E.g. resolving issues with security of supply during conflict with Gazprom in 2014-2015; crisis with control over Ukrtransgaz in September 2016; issues with the previous Supervisory Board; support of radical pricing reform in April 2016.
[23] We cannot say that current relations with the ECS and the World Bank are friendly.

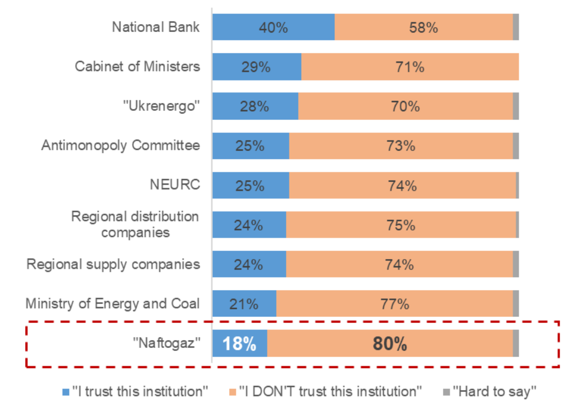
- On the other side, as Western political stakeholders have vouched for Mr.Kobolyev, this situation could have created an irrational bond between them, resulting in a risk of 'status quo' and 'confirmation' biases from the former side. It means that if Mr.Kobolyev makes a considerable mistake or shows little progress if compared to original expectations, it's possible that these stakeholders will irrationally avert opposing him. Given that we see limited ability of current Supervisory Board to challenge decisions of Naftogaz's Executive Board, we consider the risk of such biases as high, particularly for the organizational transformation process.

36. Returning to the questions that were raised in the end of the previous section, our conclusion is that:
    1) Naftogaz's expectations as of May 2018 were not overly pessimistic. The only positive deviation from then expected conservative scenario was the failure of Y.Tymoshenko in Presidential elections – but given the early parliamentary elections and reasons provided above, we do not think that political risks are currently lower than expected.
    2) In the circumstances like that, it is more than critical to systematically show solid results of transformation, and it is not allowable to postpone the delivery of any of its milestones.
    3) On the other side, we realize that market developments and toxic relations with the Government could have created more operational problems for the management than was originally expected. For the successful transformation you should usually have luxury (not least a financial one), but according to our interviews with Naftogaz's management a lot of energy was wasted on resolving important operational issues including a problem with potential insolvency. We analyze this issue in details in Section IV.

37. Before moving to the detailed analysis of transformation progress, we'll consider one more original challenge of Naftogaz, which was defined as critical in May 2018 – limited engagement of external stakeholders, with limited appreciation of company's successes. The results of recent opinion poll[24] show that:
    a) only 24% of respondents know what Naftogaz is doing;
    b) **80% of respondents do not trust Naftogaz** – it is the lowest level among all government-related institutions (see Figure 12 below). 47% of those who do not trust Naftogaz cannot say what are the rational causes of such attitude, while others say that such attitude is caused by high gas prices (27%) and corruption scandals or high salaries (17%);
    c) at the same time, there is low level of familiarity with Naftogaz's successes. **84% of respondents told that Naftogaz had no achievements** for the last two years or they do not know about such (see Figure 13 below), 6% told that victory in Stockholm arbitration is the one, and **just 4% indicated such achievements as secure supply of gas, increase in gas production, high quality of work or improvements in efficiency**.

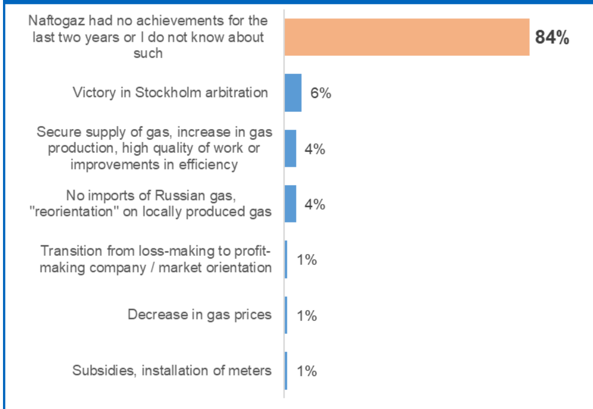
[24] The opinion poll was held by CoreStone in March 2019

Figure 12. Level of trust to selected institutions



Source: opinion poll held by CoreStone in March 2019 among a representative sample of 1657 respondents

Figure 13. What Naftogaz's achievements do you know?



Source: opinion poll held by CoreStone in March 2019 among a representative sample of 1657 respondents

38. These disappointing results lead us to the conclusion that one of the key targets of transformation – to position Naftogaz as a redesigned modern company with a strong management team by the beginning of 2019 – has failed. This conclusion leads us to another two hypotheses that will be tested below:

    Hypothesis 1. Organizational transformation has failed to meet the original deadlines, so it was not possible to position the Company as expected.

    Hypothesis 2. Organizational transformation's progress was in line with the original timeline, but communication has failed.

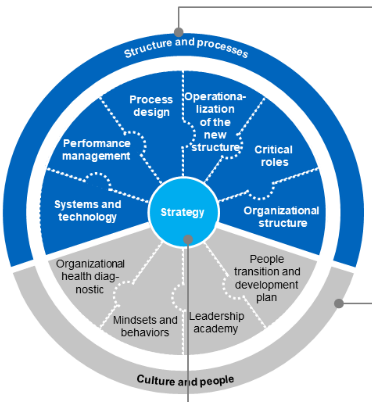
39. Another interesting conclusion from the quoted poll is that when respondents were asked what emotions they associate with Naftogaz, approximately 28% of respondents named "curiosity/interest". Almost the same percentage of respondents (34%) indicated this feeling when they were asked what emotions they associate with overall situation in Ukraine. It gives us reasons to believe that if tangible results were achieved by the end of 2018 and communicated in Q1'19, it was possible to positively change public perception of Naftogaz – people are interested about what happens in Naftogaz not less than about what happens in Ukraine.

IV. Measuring progress of organizational transformation.

a. Conformity with the original schedule of transformation.

40. Naftogaz's holistic organization transformation roadmap was built around three pillars, and each of them had a set of workstreams:

Figure 14. Pillars of workstreams of Naftogaz's transformation (as formulated in July 2018)



Priorities for Naftogaz

- Organizational redesign with focus on N-1, 2, 3
- Transition of up to 100 critical people (defined based on value agenda) to the new roles (role specifications)
- Core management processes redesign (e.g., financial planning & controlling (budgeting), people management and development, integrated risk management (risks), people performance management, strategy development (strategic planning)

- Organizational health diagnostic
- Developmental assessment and personal development plans
- Change in mindsets and behaviors
- Leadership academy

- Update of Business strategies, development of new businesses strategies and cross-businesses strategic initiatives
- Business plans incl. targets and budget for each BU cluster
- Budgeting framework development

41. In the next four tables we provide the original schedule of key actions for each of these workstreams, with a description of the status of these actions as of mid-July 2019. We have prepared this analysis on the basis of deliverables provided by the Department of Strategy of Naftogaz, and in accordance with the information received from personal interviews or gathered in Naftogaz's intranet. The content of resulting tables was discussed with the Department of Strategy, and these discussions were reflected in a version of tables presented here.

42. According to our observations on the first three workstreams, presented in Table 1, we see that the major underperformance was in operationalization of N-1 and N-2 management level on the basis of original principles agreed when the organizational transformation was initiated. For example, the new model was supposed to be based on end-to-end ownership for distinct value chains to maximize accountability for results. Given that performance management system had to provide the teams with clear targets linked to business goals, it was expected that remuneration of business unit (BU) leaders should have been tied to the increase in value of these businesses. A design of performance management system with clear internal (for end-to-end value chain) and external accountabilities was expected to develop a mindset when BU leaders were motivated to drive P&Ls and/or key value-driving initiatives (also dealing with critical market failures), while functional leaders were motivated to drive value through functional excellence (based on benchmarks), growth of service levels (QoS) and trust from stakeholders.

Table 1. Structure and processes workstreams (1/2)

✔ Completed ✔ Partially completed or completed w/ delay ✘ Not completed

	Key actions	Original schedule (2018) Jul	Aug	Sep	Oct	Nov	Dec	Was the action done?	When was the action done?	Comments
Formalized organizational structure	Adapt top team structure based on feedback (top team / supervisory board / McKinsey experts inputs), new structure is implemented in the internal documents	▬	▬	▬				✔ Partially completed or completed w/ delay	-	The process was delayed starting from Aug'2018, when there was no agreement w/ O.Prokhorenko as a potential head of "Integrated Gas"
	Refine P&L BU structure with heads of BU cluster	▬	▬	▬				✔ Partially completed or completed w/ delay	Dec'18	Refined org.structures were presented during top team WS in Dec'18.
	Make high level mapping of centralization / decentralization / outsource of activities	▬	▬	▬				✘ Not completed	-	Mapping is expected when repository of Naftogaz's processes&activities is prepared
	Develop preliminary org. structure for all levels (up to N-3) based on existing org charts and T2V		▬	▬				✔ Partially completed or completed w/ delay	Dec'18	Org.structures were presented during top team WS in Dec'18
	Further specify org. structure in select areas (below N-3 with high concentration of critical roles)			▬	▬					
	Implement changes required to formalize org. structure (based on emerging painpoints, with quarterly refining)					▬	▬	To be done on a regular basis	-	In progress (e.g. changes of organizational structure of headquarter in Mar'19 and May'19)
Critical roles	Develop and align list of up to 100 critical roles	▬	▬	▬				✔ Partially completed or completed w/ delay	Dec'18	- Top-80 roles and specifications were presented during top team WS in Dec'18 (except for Integrated Gas (Feb'19) and Gas Transit. - For some key roles immediate role focus was missing (it makes impossible to decide whether people are fit for purpose or not). - Role specifications were prepared, but they were not translated in internal documents
	Develop role specifications for up to 100 critical T2V roles and test them with experts		▬	▬	▬			✔ Partially completed or completed w/ delay	-	
	Formalize role specifications, translating them into job descriptions and formalized internal documents (including based on the legal path defined)					▬		✔ Partially completed or completed w/ delay	-	
Operationalization of the new structure	Understand the legal changes needed for transition of up to 100 critical people into new roles			▬	▬	▬		✔ Completed	-	It was decided not to change a legal structure of assets ownership or to challenge the existing regulation of approvals through the Executive Board of Naftogaz.
	Understand in detail the SOE-related constraints (e.g. legal) for changes to the operating model			▬	▬	▬				
	Assess additional political constrains for transition of up to 100 critical people into new roles			▬	▬	▬		✔ Partially completed or completed w/ delay	-	Our interviews suggest that because of a fear of "disruption from changes" it was decided to make compromises and to continue the change journey with people in the top team who were supposed to be transited to another roles (or even to be removed).
	Understand how existing roles which did not get into the new structure will be removed, also legally			▬	▬	▬				
	Design the legal way forward for all key changes based on the preliminary structure			▬	▬	▬				
	Manage the constrains clarification process and path finding			▬	▬	▬				
	N-1 is operational (contracts, targets, red lines, remuneration)			▲				✔ Partially completed or completed w/ delay	-	Remuneration isn't based on value creation, some redlines still not clear
	N-2 is operational (contracts, targets, red lines, remuneration)						▲	✘ Not completed	-	Contracts were not made operational according to the original design principles.
	Define formal launch date and take all formal decisions; decide on announcement, etc.						▬	✘ Not completed	-	There was no transition to the model based on its original design

43. Based on our interviews, a deviation from that principle was one of two key reasons why no agreement was reached with O.Prokhorenko in August 2018[25] to become a Head of Integrated Gas business. In fact, even alternative system of compensation was not proposed to O.Prokhorenko at that time, and there were significant problems with payments of his compensation according to then existing contract (we are aware of this situation, because Market Research Unit was one of several Naftogaz's units responsible for the analysis of his KPIs). This case suggests that there is a problem with management's underestimation of the importance of adequate compensation system, especially for top team from the leadership list. We see another evidence that this problem still exists based on the currently developed OKR system, as described further in this report.

44. Another relevant case in this respect is the story with Bruce Dingeman, who was appointed on a position of Director of Exploration and Production in Naftogaz in late 2017. Though in May 2018 it was decided that a Head of Exploration should be in the new organizational structure, Naftogaz

[25] During workshop in May 2018 O.Prokhorenko was considered as a key if not the only candidate for the position of Head of Integrated Gas. We had the same understanding during preliminary discussion of this role before this workshop. But in his interview in August 2018 A.Kobolyev has disclosed a new organizational structure with an open position of Head of Integrated Gas, without mentioning O.Prokhorenko there (https://www.epravda.com.ua/publications/2018/08/6/639320/)

has lost opportunity to appoint Mr.Dingeman on this position. He has left the Group in June 2018, allegedly due to some personal reasons. But during our interviews with some members of the top team we have discovered that the real reason of his withdrawal was little clarity in respect of his accountability and authority, with no understanding of how he should interact with the Head of Integrated Gas and other business units. If it is true, such case of neglecting a talent demonstrates problems with management's ability of getting talent right – one of the cornerstones of "talent-to-value" approach. According to McKinsey's data from "People and Culture" workstream, finding and retaining talent is the most significant managerial challenge over next five years, therefore it's critical for the management to have relevant skills. In this respect we recall an absurd situation that Mr.Dingeman was not able to get to the May 2018 workshop (when transformation was kicked-off) because of the red tape issues with his business trip – management could have assisted him to resolve this issues instead of ignoring it.

45. When we've asked A.Kobolyev why Head of Exploration is still not found, he said that he was not interested in finding him, because the Group had little exploration potential until recent auctions. We cannot agree with this statement and such narrow interpretation from four perspectives:
    a) organizational structure publicly presented by A.Kobolyev in August 2018 showed that there is a vacancy in Head of Exploration position – implicitly it means that in the first three months after the start of transformation CEO's position was that this role was essential;
    b) near-field exploration potential is still significant on existing permits of UGV. For example, only deep prospects at Shebelynka, considered as the best undrilled prospect in exploration portfolio of UGV, have total cumulative gas resources of all deep blocks estimated at 64 bcm (P50);
    c) the original principle of 'checks and balances' envisaged that Integrated Gas should have been treated as operator of upstream assets, while Exploration unit was supposed to play the role of owner of all licenses. Under such design the Head of Exploration was able to challenge the decisions of Integrated Gas on how to develop resources, and he was supposed to have an alternative of choosing external partner/operator if Integrated Gas treated assets inefficiently;
    d) it was also expected that the Head of Exploration should have been responsible for finding alternative ways to increase Naftogaz's resource base, e.g. by unlocking potential of "sleeping permits" through takeover of companies who owned such permits. Given that Naftogaz was considered to be a platform for international partnerships, Head of Exploration division was expected to be accountable for finding these partners to develop prospective assets (especially where new technologies should have been used extensively).[26]

46. As a follow-up case with Gas Transmission and Storage in September 2018 showed[27], some members of the top team demonstrated little understanding that creating competitive value proposition to customers <u>in a financially sustainable way</u> should be their guiding principle. Such incomplete understanding could be explained by the lack of one-to-one discussions of a design of

[26] For now the only prominent case in Naftogaz's international partnerships is a joint bid of Ukrgazvydobuvannya and Vermilion Energy in PSA tender. But even in this case (a) Vermillion is not an oil&gas major, as we've described in note to paragraph 32.e); (b) according to our interviews, Vermillion was engaged by MP O.Bielkova, not Naftogaz. It means that Naftogaz has significant gaps in capability to engage partners, and finding Head of Exploration with adequate experience in this area was and is essential for the Group.
[27] Potential Head of Gas Transmission & Storage has not demonstrated a compelling case of value creating business unit, when the strategy of Gas Transmission & Storage was presented to the Supervisory Board in September 2018.

new performance management and compensation system. This view is supported by the results of our interviews with some members of the top team[28].

47. As regards critical 100 roles[29] (second workstream in Table 1), our concern is that the list of these roles was developed only by the end of December 2018, pushing forward delivery of other dependent processes. For example, developmental assessment of top 100 leaders (see Table 3 below) required that the critical roles have been specified before that – as a result of delay in preparing a list of critical roles and other reasons described below, this assessment was and is not done, and personal development plans are still not delivered (currently this particular action is delayed by 8 months already).

48. We were informed that there was a difficulty with role specifications from the early stage of transformation, when external consultants had a formalistic approach to the development of specifications for the top team. In particular, it was not taken into account and described what specific challenges each role will face in Ukrainian and Naftogaz's realities. It could be argued that this problem still exists – many of role specifications provided to us do not have an immediate role focus, making it difficult to decide whether candidates are fit for purpose or not[30]. To our understanding, TO (Department of Strategy) was trying to close this gap in 2018, but they were overwhelmed with other tasks. On top of that, it was not clearly defined who was responsible for the development of job descriptions based on role specifications – as a result, we are aware of situations when job descriptions were prepared in a heat of negotiations with potential candidates for the top roles. We do not know whether such situations caused disruptions in hiring process, but we cannot ignore a possibility of such causal link. Overall, it's also a sign of gap in current team's capabilities related to talent management.

49. As regards the operationalization of the new structure, we should draw the attention to the following observation. In the middle of autumn of 2018 it became clear that CEO was ready to make compromises to continue transformation with people in the N-1 team who were supposed to be moved to another positions or removed from the Company. Our hypothesis is that such political decision was made because of a fear to disrupt the everyday operations of the Company – but if it is true, we cannot say that continuing the change journey with these people was not disruptive for the transformation itself. For example, if one of the top team members leverages his position to blackmail one of the leading Ukrainian universities to issue a diploma for him, we cannot say that he is not severely violating one of three "non-negotiables" formulated by CEO. Leaving this member in a top team is unacceptable, particularly because of a reliance on "role modelling" in Naftogaz's transformation. In another example we were informed that a person was promoted on a positon from top-100 roles disregarding the existence of three internal investigations of his activities on the previous position (due to suspicion of corruption).

50. The second set of workstreams (Table 2 below) provides with a more disturbing view, because almost all critical deliverables are still not existent. As regards core processes redesign, the original idea in July 2018 was to start from zero-based organizational design ideal to serve the objectives

[28] One of the possible explanation of why such discussions were not held after the start of organizational transformation could be a reluctance of CEO to pursue the implementation of such system after the announcement of 'Stockholm bonuses' (and negative public discussions about that).
[29] The scope was narrowed from 100 to 80 critical roles by the end of 2018.
[30] We have also not notices the allocation of value between roles in the provided role specifications, though originally it was agreed to identify how much value each role carries. It could also be a sign that a focus of value creation has become less pronounced in Naftogaz's change story.

and then check if real-life constraints affect this design. The principle was based on “rapid prototyping”, that could have allowed Naftogaz to: (a) create tangible realization of ideas, which could enabled organizational thinking to develop fast and concretely through action (opposite to the detailed planning with no real early results and risks that detailed plans are not realized); (b) learn faster by failing early – making things tangible allows small, low-impact failures to occur early, resulting in faster organizational learning; (c) explore new behaviors – the presence of a ‘prototype’ encourages new behaviors, relieving individuals of the responsibility to consciously change what they do.

51. Such approach was an ideal one for the core processes redesign in case of Naftogaz – to remind, the Company faced a challenge to deliver tangible transformational results by the end of 2018 and a challenge to develop new behaviors as quickly as possible. However, we were provided with the information that chosen alternative approach was based on a long-term assessment of ~8000 processes&activities of the Group, and repository of these processes is not ready yet[31]. Though the delivery of repository and redesign of processes&activities is expected by September 2019, this is very much alike the approach with detailed planning that may become paralyzed by either desire to think through a watertight plan before taking action and fear of making mistakes in implementing the plan.

[31] As of mid-July 2019 TO has been compiling the repository of processes which has covered most of Naftogaz legal entities (UGV, UTG, UTN, UAG, USTG). As of now there is a draft of the repository of the processes, however it requires further work for harmonization and completion and will be complemented with activity collection and mapping done during currently relaunched project with McKinsey (see next paragraphs)

Table 2. Structure and processes workstreams (2/2)

✓ Completed ✓ Partially completed or completed w/ delay ✗ Not completed

	Key actions	Original schedule (2018) Jul	Aug	Sep	Oct	Nov	Dec	Was the action done?	When was the action done?	Comments
Core processes redesign	Collect list of core business processes including processes to interact between HQ and BUs and BUs and supporting functions and cross cutting processes							✓ (partially / w/ delay)	Dec'18	
	Design the principles of processes of top team operations: official communication between each other and with other employees, reporting lines, direct subordinates							✓ (partially / w/ delay)	-	Team charter was presented during Nov'18 WS
	Develop RASCI for N-1 roles based on the list of core business processes							✗	-	- Redesign of key processes should have been finished by the end of 2018 for people to feel changes. - Currently used approach is based on the assessment of ~8000 processes& activities. Repository of these processes is not ready yet.
	Decide on the key interfaces with the broader organization									
	Design "light" operating model for the transition period									
	Identify functional processes or functions for separate work stream to be launched right away (e.g., procurement centralization)									
	Design detailed flow charts and descriptions for 5 key processes (will also serve as an example for other processes to be developed by the third party)									
	Develop basic principles for all the listed processes									
	Engage with subcontractor to design flow charts for all core processes									
People performance management	Define design principles for people performance management approach (ratings, targets, feedback sessions, reviews, consequence management etc.)							✓ (partially / w/ delay)	Feb'19	- Proposed OKR system deviates from the original principle.
	Collect best practices (e.g., expert call, best practices, workshop)							✓ (partially / w/ delay)		
	Design people performance management process N-1 interim solution for 2019 according to the approach defined in previous phase							✗	-	There was no effective interim solution.
	Design a roadmap for goal setting until the proper process is in place							✗	-	
	Design business planning / budgeting process solutions for interim period							✗	-	
	Define targets to be set for top team at conceptual level (items, not values), based on the transformational roadmap for 2018 and 2019 and EV calculated in value agenda							✓ (partially / w/ delay)	-	- Proposed OKR system deviates from the original principle. - OKR system is not implemented yet.
	Quantify targets based on the Naftogaz business plan							✓ (partially / w/ delay)	-	
	Formalize targets in internal documents							✓ (partially / w/ delay)	-	
	Pilot people performance management process							✓ (partially / w/ delay)	-	
	Formalize people performance management process							✓ (partially / w/ delay)	-	
	Design business analytics, reporting and decision support system							✗	-	
	Support design of the process for target tracking							✗	-	
	Discuss 1st hypothesis on up to 100 critical roles, approach and targets							✗	-	
	Implement systems for target tracking and people performance reviews							✗	-	
System and technology	Run diagnostics of core IT systems via EPR survey and testing / observation							✓ (partially / w/ delay)	Apr'19	
	Analyze results, compare with best practices and identify key gaps							✓ (partially / w/ delay)		
	Develop high level plan to close the gap							✓ (partially / w/ delay)		
	Develop RFPs and launch procurement process							✗	-	
'Naftogaz Way'	'The Naftogaz Way Book v.1 is developed			▲				✗	-	Draft was developed by TO
	'The Naftogaz Way Book v.1 is developed						▲	✗	-	

52. When asking a question on the key reason behind the delay in core processes redesign, we were provided with an answer that it was not possible to make this step before the finalization of organizational structure. We cannot fully agree with this statement, because some management processes could have been redesigned even without finalization of detailed business units' structure (e.g., financial planning & controlling (budgeting), people development, integrated risk management, people performance management).

53. To our understanding, another reason for delay in core processes redesign was a political turbulence in Q1'19. In February 2019 TO initiated engagement of McKinsey to support the following the redesign of support functions (Finance, Procurement, HR, Strategy and Legal), but due to uncertainty around the continuation of contract of CEO the project was cancelled. In the middle of June 2019 Naftogaz started renegotiation of the project with McKinsey and launched it in the beginning of July: currently engagement has been reduced to the two modules of support function redesign (including mapping of three cross-functional processes) and performance

management system setup and launch. Also as of now the following documents are at the stage of the draft:

a) Documents regulating activity and interaction between business units:
   - Regulation on interaction between business units for construction and commissioning of a new well (status according to TO: *advanced draft*)
   - Regulation on interaction between business units during service works on the well (*first draft*)
   - Regulation on interaction between business units during procurement of goods and service (*first draft*)
   - Provision on Technical division (*draft*)

b) Other documents:
   - Provision for performance management (*draft*).

54. Our opinion is that a little progress in development of and, as a matter of fact, an absence of performance management system is one of the key failures of organizational transformation. This view was also supported by our interviews with top management team – more than 50% of interviewees had the same opinion. In our view, for already one year from the start of transformation little was done to develop a performance-based mindset, quarterly and annual bonuses were approached with the wrong frame of mind, and as a result the existing system of remuneration is "corrupted":

   a) people often develop their business goals and performance indicators in a retrospective manner (the author of this report can confirm this as a head of Market Research Unit and as the one who was approached to approve annual "KPI form" for some of N-1 and N-2 team members);
   b) when people retrospectively "invent" their goals & percentage of these goals' delivery and send spreadsheets with these data to their leaders, there is often no feedback (as a result, people do not even know why they were paid or not paid with a bonus);
   c) absence of performance-based culture resulted in (a) poor operational results in some areas and (b) corrupted approach to the analysis of these results (as we describe in the next sections);
   d) behavioral KPIs are only discussed as a principle – currently they are not used at all (with members of the team responsible for the development of performance management system being skeptical in respect of such KPIs).

55. When this report was prepared, we still do not see a value-creation orientation neither in the existing system of "performance management" nor in a newly proposed OKR system, which is not implemented yet. The proposed design of OKR deviates from the originally proposed principle with focus on value creation[32], it does not provide incentives for people to come up with and take accountability for the new value-creating initiatives, and, as mentioned by one of our interviewees from the top management team, *"the full algorithm of goal setting and its link with compensation under OKR system is not communicated*". Though the expected implementation of this system is better than current vacuum in performance management (at least performance dialogues were

[32] As we've already mentioned, the original principle was that end-to-end ownership for distinct value chains and remuneration based on creating or enabling value should have maximized accountability for results.

initiated), we do not think that OKRs have the same potential for promoting efficient personal accountability as the system discussed last summer. During our interview with A.Kobolyev he mentioned that OKR system was more suitable for a changing environment, but our follow-up research has not confirmed that other options for sharing long-term value with those who help creating it are less effective.

56. One may oppose by saying that system based on value agenda is not suitable for Naftogaz because it's a private company – and it's not possible neither to track changes in Company's value nor to compensate people based on change in Company's EV. But we are aware of value-based compensation systems that are implemented in private companies, where an internal or external valuation of the company takes place (e.g. full value phantom stock plans, performance phantom share plans and even phantom stock option plan, SAR). There are also other meaningful alternatives to phantom stock-based systems, which also allow to effectively share value with those who create it, like performance unit plans (PUP), Profit Pool system, strategic deferred compensation plans. Having said that, we also do not understand why some elements based on assessments of value creation were not embedded into the new OKR system.

57. One of our interviewees made an interesting remark on this issue. If we want to minimize risks of corruption at the lower levels of organization and promote value creation principle there, we can't expect that this objective can be always achieved just by higher fixed compensation with bonuses linked to a this fixed part of compensation. Based on a hypothesis that currently some corruption exists and people behind it treat own "schemes" as some kind of business, Naftogaz may leverage this proxy of "business owner" mindset by proposing a compensation based on achieved effect for company's value – and if Naftogaz is using its current OKR approach, we destroy even such rudimentary "business owner" mindset. In this respect we've also noticed that some of our interviewees told that CEO has a problem with appreciation of implemented initiatives. Though in some cases we have not seen such behavior (e.g. in respect of Stockholm Arbitrations), case with the contract of O.Prohorenko provides evidence that such problem could really exist.

58. Though CEO says that a key reason behind using OKR system is that it's more suitable in a changing environment, we think that other critical reasons could explain this choice. As the head of one division said, he is still not able to track P&L of his business unit on a regular basis (after one year from the start of transformation, when it was decided that possibility to do that should be a cornerstone of personal accountability principle). In addition, we still do not see a development of comprehensive business analytics, reporting and decision support system, though a development of so-called "dashboard" was actively discussed in October 2018[33]. On top of that, comprehensive long-term integrated financial model of the Group is still not developed as of July 2019, and teams of divisions showed significant lack in capabilities when they had been preparing business plans. Considering all these gaps, we suppose that CEO also understands such problems with data and business analytics, so he could have been reluctant to rely on a performance management system that would track company's value unreliably. But, to be honest, little was done to close abovementioned gaps for the last year, the progress with that is still slow, and CEO

[33] When we've asked why the development of the "dashboard" project was stopped, one interviewee said that it was a fault of consolidated reporting division, while other interviewee said that consolidated reporting division was not provided with the explanation of who would be the users of such system, and because of this uncertainty its development was abandoned. To our knowledge, the third reason is that procurement of IT system, on which 'dashboard' should have been based, has failed.

with the TO also hold responsibility for that. For example, we recall a situation when Provision on Segment Reporting was discussed during this spring, and it took more than two months just to *start* discussing some disagreements in approaches to segment reporting with the TO.

59. As for the last workstream in Table 2, the fact that 'The Naftogaz Way' playbook is also not delivered[34] is caused by the fact that internal "rule of law" is still not developed. To our understanding, top management has no clear view on what are key activities, business principles and policies on key processes and decision-making rights, including delegation of authority, in Naftogaz. As a result, there is no possibility to issue the playbook and to effectively promote role-modeling, foster understanding and conviction of Naftogaz's employees, raise compassion and empathy of those external stakeholders to whom the book had to be provided.

Table 3. Culture and people workstreams

✓ Completed ✓ Partially completed or completed w/ delay ✗ Not completed

	Key actions	Was the action done?	When the action was done?	Comments
Organizational health diagnostic	Launch organizational health survey among top 5000	Completed	Sep'18	
	Evaluate survey results	Partially completed or completed w/ delay	Oct-Nov'18	
	Discuss OHI results with top team and design path to improve results (e.g., one top team workshop; possible 1:1 discussions with each top team member on their results in the next project phase)	Completed	Nov'18	Results and high-level action plan were discussed during top team WS in Nov'18
	Discuss OHI results with N-2 team and design the path to improve results	Partially completed or completed w/ delay	-	Cascading of OHI results continued in Q1'19
	Develop specific initiatives and action plan to improve OHI	Completed	Feb'19	Detailed plan was presented in Feb'19 WS of the top team
	Yearly OHI survey (January-February)	Not completed	-	
Mindsets and behaviors	**Role modeling**			
	Run top team effectiveness survey	Partially completed or completed w/ delay	Jan'19	
	Evaluate survey results	Partially completed or completed w/ delay	Feb'19	
	Hold 2-3 top team alignment workshops (incl. discussion of the top team effectiveness survey)	Completed	-	Our concern is that not all key members of the team were on these WSs
	Conduct 1-2 coaching sessions per N-1 and selected 100 roles	Partially completed or completed w/ delay	-	Coaching for top 80/100 (except for N-1) not launched
	Developing talent and skills			
	Develop system of regular top talent reviews on group level	Partially completed or completed w/ delay	Feb'19	System is developed but not launched.
	Develop Naftogaz leadership competence model	Partially completed or completed w/ delay	Nov'18	Draft of competence model was developed, but it was not approved
	Detail Naftogaz leadership competence model	Not completed	-	
	Understanding and conviction			
	Develop change story publication (internal)	Partially completed or completed w/ delay	Nov'18	Delivered but not published
	Develop schedule of townhalls and preliminary agenda / speech	Partially completed or completed w/ delay	-	Schedule is not adhered to.
	Run OHI and change workshops for N-1 teams	Partially completed or completed w/ delay	-	Workshops continued in Feb'19.
	Reinforcement mechanism			
	Develop behavioral KPIs	Partially completed or completed w/ delay	Feb'19	Design for behavioral KPIs was developed, but it was not operationalized.
	Align behavioral KPIs, anchoring w/ leaders' performance KPIs	Not completed	-	
People transition and development	Run developmental assessment for up to 100 critical roles (top team only in Q3 and remaining 50 critical roles in Q4)	Partially completed or completed w/ delay	-	Developmental assessment was done only for the top team.
	Draft dev.journey for 100 critical roles, incl. personal dev.plans	Not completed	-	
	Develop specific transition plan for up to 100 critical roles	Not completed	-	
	Develop hiring strategy for external candidates	Partially completed or completed w/ delay	-	External recruiting for some of N-1 roles has failed.
	Launch external recruiting or implement an interim solution	Partially completed or completed w/ delay	-	

60. The workstream of "Culture and People" (Table 3 above) is also significantly behind the original schedule. As we've said already, developmental assessment was delayed partly due to the delay in delivery of the list of critical roles. But on top of that the whole workstream was paused in February 2019 when it was not clear what will happen with the contract of current CEO of

[34] Draft of 'Naftogaz Way' book was prepared by TO and provided to Y.Vitrenko in autumn 2018 and to A.Kobolyev in December 2018, but these drafts were not approved.

Naftogaz, A.Kobolyev. And it was not re-started with external consultants until late May 2019, after the Presidential elections were held.

61. As regards organizational health diagnostic, the first OHI survey was conducted as planned, and it has shown that Naftogaz' overall health is in the 3rd quartile of the OHI global benchmark. Detailed plan to improve OHI was developed in February 2019, but as far as we understand it was not launched. Planned yearly survey was also not held in January-February 2019, so it is not possible to measure whether there were positive changes in Naftogaz's health or not since the launch of transformation in July 2018. Consequently, nothing about developments in OHI of Naftogaz is mentioned in the 2018 Annual Report.

62. We also see a significant problem with a delivery of a change story of Naftogaz. Transformation was expected to be supported by a clear narrative and internal communication strategy to ensure "stickiness" of the ideas. Though a narrative was developed by Y.Vitrenko and published in Ukrainian mass-media, we see alienation of the rest of the top team from this narrative – as a result, it has not been widely used neither in internal nor in external communication as expected (we are also not aware of any alternative narrative). In terms of internal communications, we have observed one townhall in Naftogaz's headquarters and, to our understanding, there were several subsidiary workshops where top team members shared their story. But the story was not cascaded on the lower level after that: there were no local workshops, top 200-300 transformation summit, CEO roadshow and mass dissemination over intranet (as originally planned). For example, if a new employee comes to Naftogaz, the only thing she sees in Company's intranet in respect of Naftogaz's strategy is an outdated excerpt from 2014 Naftogaz Annual Report. It is obviously hard to achieve a "stickiness" of a change story and stakeholders' engagement in such way.

63. As A.Osmolovska told us, there were no detailed communication on transformation of Naftogaz yet, because: (a) townhalls were stopped in view of political uncertainties this winter, (b) there were no mutual understanding within top-team on how the Group would work after transformation (particularly, what will happen with support functions, and how newly created divisions will interact), (c) it's not known what is the current schedule of organizational transformation. She says that now there is common understanding of at least a connection between corporate goals and OKRs of heads of divisions, so the communication of this particular topic is expected soon. In our view, such expected internal communication has a very limited scope, and it is highly possible that this case will become an example of what we call "*too little, too late*" (given a background described in Section III).

64. Our interviews have showed that almost all members of the top management think that there is a significant gap in communication on Naftogaz's transformation even on the level of the top team. They say that there are no discussions of transformation's progress, no dialogues on possible failures of transformation and reasons behind such failures, team workshops are too sporadic. One interviewee even said that current communications in the top team is worse than it was in 2014, and no alignment on strategy is a very disruptive factor for decision-making.

65. In terms of Strategy workstreams (Table 4 below), the positive moment is that business plans for two "divisions"[35] were approved by the Supervisory Board, and accountable heads of these

[35] "Division" is the alternative notion to the originally planned "Business Units"

divisions committed to be responsible for the implementation of these business plans: Integrated Gas, Oil mid- and downstream[36].

Table 4. Strategy workstreams

✓ Completed ✓ Partially completed or completed w/ delay ✗ Not completed ▲ SB presentations (as expected)

	Key actions	Original schedule (2018) Jul	Aug	Sep	Oct	Nov	Dec	Was the action done?	When the action was done?	Comments
Strategies	Development/update of BU cluster strategies (momentum growth)									
	– Gas transmission and storage							✓ (partially)	-	- Hypothesis that T&S is a P&L BU was not confirmed - The strategy is not developed
	– Oil mid- and downstream							✓	Mar'19	Oct'18 version of strategy was redesigned in Mar'19
	– Integrated gas							✓	Nov'18	Nov'18 version of strategy was redesigned in Feb'19
	– Gas transit							✓	Dec'18	
	Alignment and work on open questions							✓ (partially)	-	E.g., there was no alignment on Gas Transit and T&S strategies
	Development of strategic initiatives							✓	-	
	Development of new businesses strategies							✓ (partially)	-	Strategy for Technical BEU was developed (May'19)
Overall business plans development	Development of overall business plans									
	– Gas transmission and storage							✗	-	Business plan was not approved (see above)
	– Oil mid- and downstream							✓ (partially)	Mar'19	Business plan was approved in Mar'19
	– Integrated gas							✓ (partially)	Feb'19	Business plan was approved in Feb'19
	– Gas transit							✓ (partially)		Bus.plan was submitted in Dec'18, but not approved
	– Strategic initiatives							✓ (partially)	-	
	– New businesses strategies							✓ (partially)	-	
	Alignment and work on open questions							✓ (partially)	-	
Financial model development	Development of integrated 10Yr financial model							✗	-	Consolidated business plan and updated corporate strategy are not delivered (currently 5Yr model is expected by Sep'19)
	Preparation of integrated report and SB presentation							✗	-	
	– Gas transmission and storage			▲				✗	-	Business plan was not approved (see above)
	– Oil mid- and downstream				▲			✓ (partially)	Mar'19	Bus.plan was approved in Mar'19
	– Integrated gas					▲		✓ (partially)	Feb'19	Bus.plan was approved in Feb'19
	– Gas transit						▲	✓ (partially)	-	Bus.plan was submitted in Dec'18, but not approved
Budgeting	Methodology of allocation of budget to legal entities							✓ (partially)	-	Integrated business & financial planning policy is currently expected by Sep'19
	Development of budget for 2019 (based on Bus.plans)							✓		

66. At the same time, some critical milestones are missiong. In particular, after the potential head of Gas Transmission&Storage BU has not demonstrated a compelling business case in September 2018, it was still essential to ensure sustainable business model of TSO before 2020. As an option, another potential head of this BU could have been found, who could have proposed an alternative business case. Or, as was discussed in October 2018, it was possible to include Gas Transmission&Storage (T&S) as a cost center/value enabling unit in Integrated Gas business, and to ensure improvement of T&S efficiency as a part of value chain of the latter business unit. However, this was not done, and it was chosen not to pursue a development of the strategy of T&S – we were provided with the explanation that this choice is made because TSO will be unbundled

[36] We analyze these business plans in a separate section

in 2020. We are of the view that such choice contradicts Naftogaz's corporate strategy, where it is said that Naftogaz as a driver of market transformation should assist in securing "*smooth unbundling of the TSO*" – to our understanding, this process includes securing financial sustainability of the TSO in case of zero transit beyond 2019. As also specified in corporate strategy's key actions to mitigate risks after TSO unbundling, Naftogaz should develop a "*master plan and equity story for the TSO*", and to prepare "*an attractive case for the independent partner to operate and possibly invest in the TSO*". Our interviews with A.Kobolyev and T&S team showed that CEO wants this team to behave more accountably in respect of achieving financial sustainability of the GTS operator, but we also saw high risks that T&S team will not feel such accountability as CEO wants, particularly because their compensation system is not directly linked to resolving operator's financial problems and increase in its value. This brings us back to the discussion of management's gap in understanding principles of value-based performance management.

67. Another problem with Strategy workstream is that there is still no consolidated business plan and updated Corporate Strategy – though it was expected by the end of 2018, currently these deliverables are expected by the Strategy team only by September 2019 (with at least 9 months delay). Group's integrated business and financial planning policy is also in progress, and could be finalized in the same month, but there is high risk that this process will be derailed because of the expected changes related to CFO position.

68. The analysis provided above shows that there is a delay in all key workstreams of Naftogaz's organizational transformation, sometimes this delay is more than a year, and it is not clear when some final deliverables will be developed. It leads us to the conclusion that Hypothesis 1 (see paragraph 38) should be confirmed – **it was not possible to position Naftogaz as a redesigned company with strong management team by the beginning of 2019. Based on the current status of transformation, we can say that it's not possible to do such positioning even now**. Given that there are no bright announcements on achievements of transformation both in internal and external communications, we suppose that current management realizes this fact[37]. Interview with A.Osmolovska, as quoted in paragraph 63, also proves that. As we've mentioned above, such situation creates significant risks of losing support of international partners, disintegration of Naftogaz and, more broadly, of losing possibility to use Naftogaz as a platform for Ukrainian gas market transformation.

69. Given that we do not possess enough knowledge and experience in respect of successful transformations' implementations, we do not feel it is legitimate to provide any solid recommendations on what should be done with Naftogaz's change journey at the moment. At the same time, we can provide some not mutually exclusive *hypotheses* on the reasons about why there was such a disruption in transformation, with a brief analysis on each of them:

    a) **Competency and capacities of Naftogaz's top leaders to implement transformation were overestimated**: both of A.Kobolyev (who as CEO was personally accountable for the transformation starting from May 2018) and of Y.Vitrenko (when he was framing the

[37] Such understanding is indirectly confirmed by the fact that implementation of another phase of "People and Culture" workstream was suspended in February 2019 allegedly because of no clarity about the contract of current CEO - but the workstream was not launched even after March 2019, when there was a clarity that the contract is signed.

organizational transformation in May 2018 – October 2018). Coordination of engagement of multifunctional team that included strategic management consultants, legal, HR consultants and Naftogaz's transformation office to implement the designed holistic changes may have been too complex for the current management – namely, because of a lack of experience in such holistic transformations and lack of time due to significant engagement of these persons in other operational processes and projects. If it is so, the responsibility for that also lies on external consultants, who must have highlighted the experience with transformation of large corporations as a critical one when role specifications for the top team were developed[38].

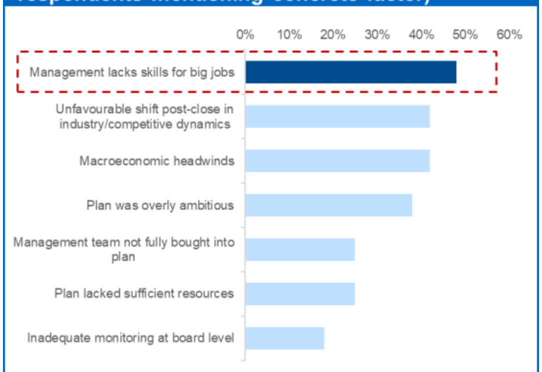
b) **Competency and capacities of other members of management team was also overestimated, and CEO was reluctant to make changes in the top team.** On the one side, transformation was based on personal accountability of leaders of key Naftogaz's businesses, but on the other side we saw that business teams showed significant lack in capabilities, e.g. when they had been preparing business plans. As a result, TO had to develop first versions of business plans almost by themselves, and it took significantly longer than expected for the teams of business units and their leaders to become personally accountable for the results (or even for the delivery of business plans in this case). Given little trust in business units' competences, CEO was not comfortable not to interfere in some operational questions of business units – this issue resulted in deviations from the original principles of transformation process. It was also understood from the beginning that some members of the top team do not fit the purpose of transformation, but they were left in the team because of the different reasons[39] – this created a 'domino effect' for some essential workstreams of Naftogaz's change. In this respect we recall how McKinsey and other international consultants stressed the importance of talent management and management's competences for the successful company's transformation (see Figures 15 and 16 below). During our interview with A.Kobolyev he also said that one of key failures of transformation was a slow pace of top team operationalization by recruiting people with adequate skills.

Figure 15. Excerpt from McKinsey's presentation for Dec'18 top team workshop



Source: McKinsey Global Forces Executive Opinion Survey; Next Generation Talent research

Figure 16. Why value-creation plans fail (% of respondents mentioning concrete factor)



Source: Bain & Company (Global Private Equity Report 2016)

[38] In the CEO's role specification provided to us it was said that "*Business and Culture Transformation* ***is a plus***" – in other words, it was not positioned as an essential competency.

[39] E.g. some members were left in the team because there were problems with recruiting process, while others were left because CEO was concerned about negative effect of their departure from the company on the everyday Naftogaz's operations

c) **Supervisory Board was not ready to hold CEO accountable** for the non-delivery of tangible results in organizational transformation. In fact, as we've revealed in our interviews, some members of the top team are concerned that there are no professionals with technical oil&gas skills or representatives with experience in holistic transformations in Naftogaz's Supervisory Board [40]. Such lack of skills creates a huge risks for Naftogaz – Supervisory Board is neither able to challenge top management's decisions nor able to provide necessary guidance in many critical areas. One of our interviewees said that (a) there were solid technical professionals in previous Naftogaz's Supervisory Board, and such configuration helped to "keep the company in shape"; (b) composition of current Supervisory Board makes it possible to resolve just political issues for the Company, not business ones. The problem with adequate technical expertise in decision making is not unique for the Supervisory Board of Naftogaz – as we demonstrate below, lack of such expertise in Naftogaz's headquarters leads to incorrect business decisions and, consequently, to losing value. In our opinion, there is another problem with current Supervisory Board, also relevant for the case of organizational transformation. Given that board's members stood up for A.Kobolyev when the Government blamed the company for 'Stockholm bonuses' in 2018 and when the Prime-Minister did not want a prolongation of the contract with current CEO in Q1'2019, an irrational bond with 'status quo' and 'confirmation' biases' analogous to those described in paragraph 35 appeared. Our view is that all these problems lead to the situation with no adequate system of 'checks and balances' on the level between Supervisory Board and Executive Board.

d) **The original schedule heavily relied on institutional capacity of external strategic management consultants** (particularly in operationalization of "talent-to-value" approach). As the first problems with role specifications demonstrated during summer 2018, McKinsey were not able to deliver aligned deliverables in time[41]. We are also not sure if their designated team had practical experience in implementation of talent-to-value approach in large organizations like Naftogaz. Two interviewees have told us that they have significant concerns in respect of low quality of McKinsey's deliverables, allegedly caused by lack of competition in the segment of strategic management consultancy in Ukraine. Another problem with McKinsey was their behavior of communicating directly with the CEO, without notifying the representatives of TO about the conclusions of such talks with A.Kobolyev. In some episodes this behaviour was leading to miscommunication in respect of transformation processes, creating ambiguities in who does what, and what workstreams have a priority.

e) During our interviews we've also heard an explanation that **delay in all key workstreams of transformation was caused by external problems**, particularly by toxic relations with local political stakeholders and by financial deficit of Naftogaz caused by existing market failures. For example, A.Kobolyev told us that a lot of energy was put into resolving the issue of company's solvency starting from October 2018, and he started to feel comfort in this respect only after recent placement of Eurobonds. Another significant issue was Government's behavior in Q1'2019, when it was not clear what will happen with A.Kobolyev's contract. We have two reservations in this respect.

[40] We must say that the same is true for Naftogaz's Executive Board. To our knowledge, there are no successful NOCs without professionals with technical oil&gas skills in Executive or Supervisory Boards.
[41] There could also be a conflict of interest for consultants in respect of rapid transformation, because payments to them are mostly linked to the time spent on the project, not results.

First, when organizational transformation has started, it was more than clear that current Government behaves like a 'loose cannon', and there is high risk that Naftogaz will face significant liquidity issues. For example, the following risks were disclosed in the first draft of Eurobond prospectus prepared in mid-August 2018:

- "***The increase of outstanding debts*** *by the district heating companies and regional gas suppliers to Naftogaz* ***and the requirement to pay dividends*** *to the state budget pose* ***significant threats to the Group's liquidity***".
- *"Naftogaz and its subsidiaries bear a substantial tax burden and are* ***exposed to the Government changing the amount of tax payable by them****… Political pressure aimed at addressing social and economic issues increases the risk that the Government may increase the Group's tax burden. Furthermore,* ***there can be no assurance that the normative for mandatory dividend distribution by Naftogaz to the Government is not increased****. Any increase may have a material adverse effect on the Group's business, results of operations, financial condition and prospects*".
- *"The continuation of the PSO on its current terms could result in increased amounts of accounts receivable and associated* ***liquidity challenges, which may have a material adverse effect on the Group's business****, results of operations, financial condition and prospects".*
- *"****Naftogaz's management may experience political influence from the Cabinet of Ministers of Ukraine*** *because such [corporate governance] reform is progressing slowly and clear and transparent distribution of powers between the sole shareholder and the Supervisory Board has not been completed yet".*

Furthermore, we, as a party of the process, remember that a question of significant expected cash deficit in Q4'2018-2019 (in amount of up to UAH 60 bn in 2019) was raised already during a series of Naftogaz's talks with IMF representatives, which has started in mid-September 2018. To sum up: (a) we can't say that political and financial problems appeared in Q4'2018-2019 were unexpected; (b) our concern is why the company has not actively tried to tackle these risks beforehand. In particular, when we've joined a discussion with the IMF in September 2018, the representatives of financial function have not put the question of expected financial deficit straight – on the contrary, we saw that the company's representatives were convincing the IMF that Naftogaz was able to cover the deficit. Such behavior and company's inability to attract financing by ways alternative to Eurobond placement (e.g. through international partnerships in upstream) resonate with issues of lack of skills, reluctance to change the team rapidly and shortcomings in internal communications.

Second, risk with prolongation of the contract with A.Kobolyev was understood to be high already when initial schedule of transformation was developed in May 2018. As we've stated above in paragraph 17, the way of transformation's implementation (leading role of CEO) had to be based on the existing cultural features and hierarchical management style in the Group. According to Y.Vitrenko, in May 2018 there were expectations that abovementioned top-down hierarchical model would stop working as planned by the end of 2018, because then other members of the top team would start understanding that A.Kobolyev will not hold a position of CEO soon. In such circumstances it was understood that tangible results of transformation had to be delivered before 2019 – basically, that was one of the reasons why a schedule with significant changes until the end of 2018 was developed. With operationalized

top team of modern professionals, redesigned processes, active engagement campaign, initiated international partnerships etc. it could have been hard for the Government to legitimately seek termination of the A.Kobolyev's contract[42]. Based on these facts, we do not find it legitimate to claim that unforeseen problems with CEO's contract were the reasons behind stalled transformation – on the contrary, such problems were expected already in May 2018 and such expectations formed a basis for the transformation roadmap then.

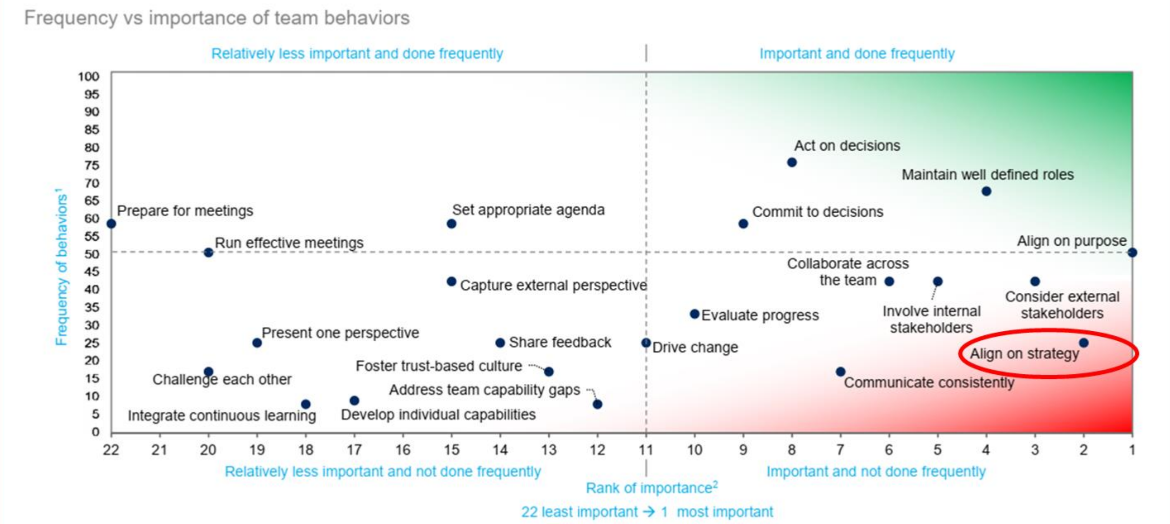
f) It is also possible that **controversial and resonant attitude to bonuses for the results of Stockholm arbitration** have made CEO reluctant to 'rock the boat' and to pursue radical changes in Naftogaz. For example, it could be another reason why performance management system based on value creation became stalled.

g) There may have been **no real alignment in management's view on the principle approach to Naftogaz's change journey when the transformation was initiated**. As we have said in Section II, approximately 33% of all failed transformations are explained by the fact that management deviates from the agreed agenda, and in Figure 16 this explanation is among top-5 reasons of why value-creation plan fails. In this context the following two pieces of data should be considered:

- As described in paragraph 16, there was a hidden misalignment between A.Kobolyev and Y.Vitrenko in respect of principles and original goal of transformation. As we've discovered during our interview with CEO, he thinks that one of his personal mistakes was a lack of attention to the development of design of transformation in March-May 2018. If it's true, earlier attention of CEO to the details of transformation could have helped to identify difference in opinion at earlier stage, and the conflict could have been resolved beforehand – but such CEO's statement sounds disturbing to us from two perspectives. First, saying that the original design of transformation was wrong could be a sign of finding excuses for lagging transformation by blaming those who developed that design (most likely, Y.Vitrenko). Second, by implicitly saying that original design had critical flaws when CEO was personally accountable for checking if there were no such flaws before the kick-off of transformation, it would be hard to engage top team in ongoing transformation journey.
- Naftogaz's top team effectiveness survey held in January 2019 showed no alignment on strategy (the second most important behavior according to the same survey):

[42] As we've said above, the reason why the contact with A.Kobolyev was prolonged in March 2019 was a personal support of US, not a leverage on successes of transformation

Figure 17. Excerpt from Naftogaz's Top Team Effectiveness Survey (January 2019)



1 – Percentage of respondents who selected 'often' or 'almost always' on behavior statements
2 – Participants' ranking of importance (1 – most important, 22 – least important)

h) **CEO may have delegated too many responsibilities to the TO** in areas, where he should have been more directly involved (as a person accountable for transformation) or in areas that could potentially have been delegated to other divisions. As a result, Department of Strategy of Naftogaz became overwhelmed under the pressure of a constant flow of other tasks, and it was hard for them to concentrate just on transformation.

i) **Initial hypothesis on value agenda was not so accurate as expected by the top management team,** and it was developed in Naftogaz's headquarter based on "top-down" approach, therefore familiarization of business leaders with this agenda, its specification in business strategies and making a commitment to deliver this agenda by business leaders took significantly longer time than expected.

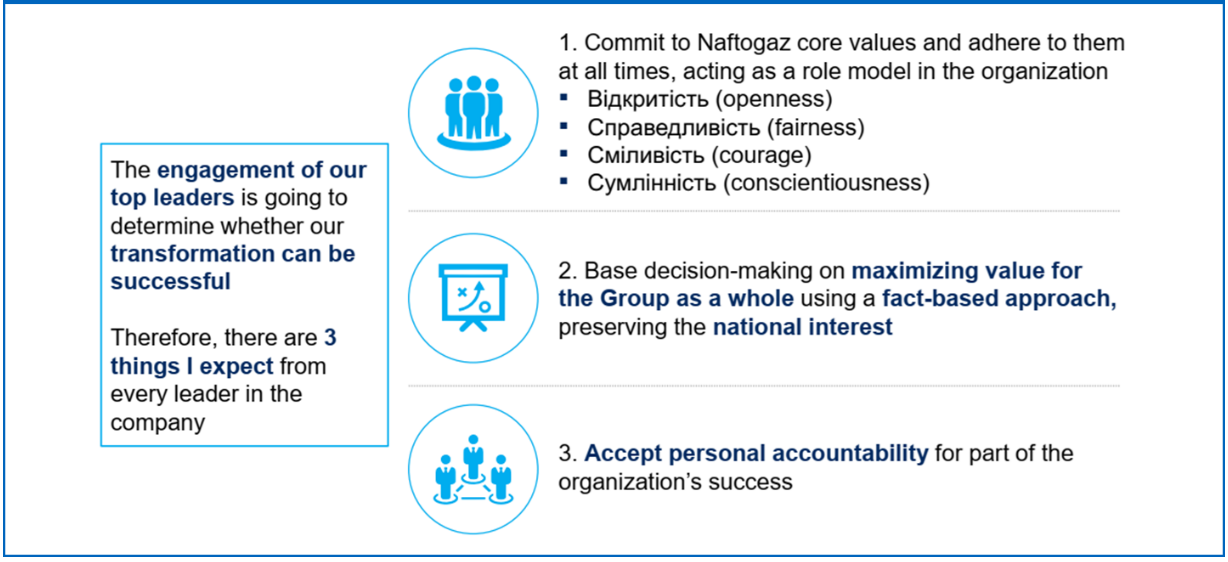
70. We are expecting to see results of yearly OHI survey – as of February 2019 it was planned to be held in September 2019. This survey should either confirm or reject the hypothesis that there are minor if not negligible changes in Naftogaz's organizational health. If the survey is postponed again, it would be another sign that current management realizes existing failures of transformation.

b. Conformity with the original non-negotiables of transformation.

71. Being accountable for the transformation means that senior executives must be not only "on top" of the change program, but also "in front," modeling the new behaviors they are asking of their people – that is what "role modelling" is about. When employees see superiors, peers and subordinates behaving in the new way, it creates powerful, positive role models of people "like them" who had successfully changed.

72. As regards Naftogaz's transformation, this principle was formulated (and delivered by CEO already in May 2018) as non-negotiables for business leaders. It was declared that only those who are compliant with these non-negotiables can stay in the top team:

Figure 18. Excerpt from address by CEO to the top team in May 2018



73. We think it was and is critical for Naftogaz's management, and especially for CEO, to strictly adhere to these principles. But, as a matter of fact, for the last year we have seen many occasions when non-compliance with them was tolerated by the Executive Board. Below we provide some of them.

74. We have observed the first "red flag" already in July 2018, when the following was declared during the top team workshop: "*Only business leaders matching the 3 non-negotiables can expect to stay in the leadership team **in the long run***". Such formulation could be treated as a tolerance to deviations from suggested principles ***in the short run*** – but then these principles cannot be called "non-negotiables". This approach may have been explained by political constraints to reshuffle the team at that time, but given that a rapid transformation was planned, this approach could have been withdrawn as soon as possible. Surprisingly for us, in presentational materials as of February 2019 we still find a phrase "in the long run". When we've asked A.Kobolyev a question about his understanding of the principle of "non-negotiables", he told that the top management should be provided with a transition period of one year during which violations of non-negotiables are tolerated, but in case of actual violations they should be discussed one-to-one between the 'perpetrator' and the CEO (new mindset is 'nurtured'). In our opinion, such approach it too lenient, and the principle of punishment should be the following: (a) if there is severe violation, the person could be excluded from the top team without any warnings; (b) if is not clear whether the violation is severe or not, the violator should be warned after the first case, but should be dismissed after the second violation (instead of tolerating the violations during a predetermined "transition period").

75. We have already mentioned another case above when one of the top team members leveraged his position to blackmail one of the leading Ukrainian universities to issue a diploma for him. This behavior was in direct violation of such expressed Naftogaz's core values as "fairness" and "conscientiousness" – but this leader is still holding his position in the Company (in fact, he was even promoted when the new organizational structure was approved in July 2018).

76. Another flashy case-study is a situation with gas sales in Q4'18 and appointment of Mr.Favorov as a Head of Integrated Gas at that time. Leaving some issues of this case behind the brackets[43], we refer to the results of recent forensic investigation by KPMG. KPMG has confirmed that there was a conflict of interest between Mr.Favorov's position in Naftogaz and his position as a founder of ERU Trading at least until February 2019 (and it could still be, according to the report). To our knowledge, Mr.Favorov has not disclosed this fact to the management when abovementioned gas sales were discussed in late December 2018 and early January 2019 – on the contrary, Mr. Favorov has stated that there was no conflict of interest and he had no financial interest in ERU Trading at that time. Mr.Favorov also states that he had not influenced discussed gas sales, which is untrue. These behaviors are in direct contradiction with the "openness" and "courage" values. If Mr.Favorov has disclosed this conflict of interest to some members of the top team or if it was known to them that he had affected gas sales in November-December 2018, the situation is even worse – because then it is not only him who violated 'non-negotiables'.

At the time that Mr Favorov joined Naftogaz in November/December 2018, there was a conflict of interest between his new role at the company and his prior position as founder of the gas trading company ERU Trading, which already had contracts in place with both NGT and UTG. The fact that he had not yet sold his stake when his position was announced, and the fact that the sale was only completed in early 2019, compounds this conflict. Further, the importance of the perceived conflict of interest, even after he sold his stake, cannot be overstated for a public company like Naftogaz.

Excerpt from KPMG Report for Naftogaz dated April 9, 2019

77. To our knowledge, Mr.Favorov was not held accountable for not disclosing his conflict of interest – if it is really so, this public case could hardly promote personal accountability as a core for role modelling in Naftogaz. As also stated in KPMG report, "*No communication was made either to the public or within the company acknowledging the COI [conflict of interest], stating what steps had been taken to mitigate it, and what mechanisms were available for reporting any allegations of misconduct to mitigate the risk associated with the real and perceived COI.*"

78. Recent events in this case raise more concerns about the ability of Company's management to safeguard the declared "non-negotiables". We obviously cannot say that 'tampering' of facts to dismiss Mr.Volynets, Head of Naftogaz Trading, is an outstanding example of how "fairness" value is followed. We are also surprised that many members of the top team who are aware of these events are tolerant to this process or even take active part in it. That situation as a whole goes beyond the question of compliance with original principles of transformation, this begs a question whether such behavior is lawful at all.

79. As a Market Research Unit, we are also aware of other cases where Mr.Favorov has deviated from "non-negotiables" like openness. Despite several requests were sent to him to provide information on the increase in volumes of gas for technical needs in Ukrgazvydobuvannya, he resisted to open these data, and this behavior was again tolerated by CEO (as evidenced by internal memos). We were not provided with a reasonable explanation of such behavior[44], so by default we should assume that there was no readiness to be open with uncomfortable questions.

[43] We don't describe some issues in detail because one may say that Market Research Unit is biased in respect of this question. But we are still of the view that gas from UGSs could have been sold at higher prices in November-December 2018 (that is confirmed by the new recently appeared evidence in this case), and losing this opportunity was a violation of "conscientiousness" value. Another non-negotiable ("base decision-making on maximizing value for the Group using a fact-based approach") was also not adhered to.

[44] One of our hypothesis is that management was afraid to disclose these data before the placement of Eurobonds. If public statements in respect of this issue appear from the Company next week, such event will support this hypothesis.

80. As we have admitted above, there is still no performance-based culture in a Group, which could have motivated people to create value. As a result of non-existence of adequate performance management system we can say that existent compensation system violates a "fairness" value. People often develop their business goals and performance indicators in a retrospective manner, and there is often no feedback on their performance (as a result, people do not even know why they were paid or not paid with a bonus). Such system creates a risk of higher remuneration for those people who are more loyal to their superiors instead of those who are more effective ones. It seems strange to us why this system exists for already more than a year after the moment when transformation has started. In this context it is notable that last year OHI survey showed that the most problematic area for the Company is motivation, particularly "rewards and recognitions":

Figure 19. The management practice profile based on 2018 OHI survey



81. In relation to the inefficient performance management system it should be noted that we still see no clear accountability in some areas[45]. Such situation makes hard for people to be compliant with such non-negotiable as "**Accept personal accountability for part of the organization's success**". To remind, one of the rationale for new operation model of Naftogaz was to set "*clear internal (for end-to-end value chain) and external accountabilities to deal with market failures*". If many people still do not understand what they are accountable for and how it affects their remuneration, it would be hard to expect that they will be motivated to deal with market failures.

82. The next question that we want to raise is a compliance with such non-negotiable as "**Base decision-making on maximizing value for the Group as a whole using a fact-based approach, preserving the national interest**".

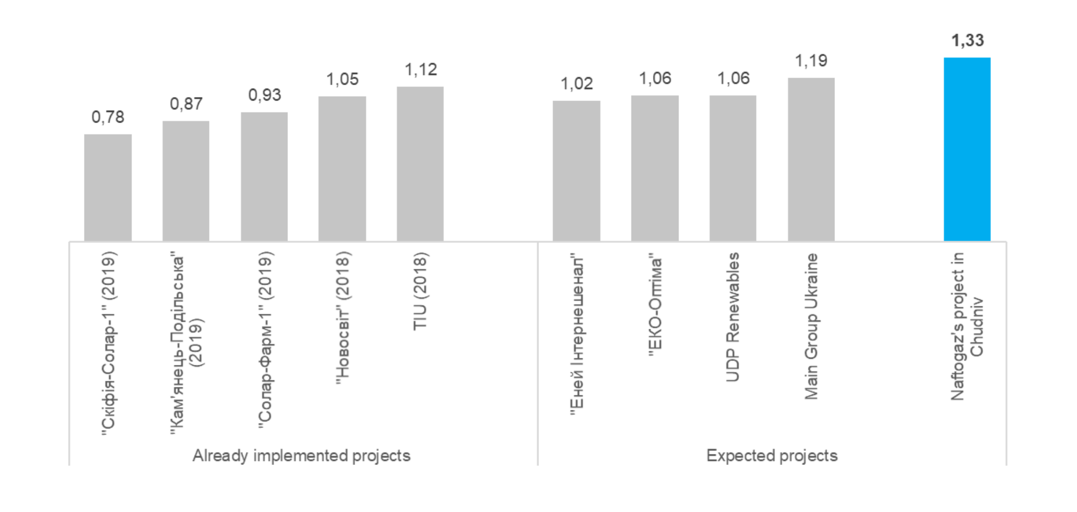
[45] For example, our communication with UTG in Q1'19 revealed that there is no understanding who is personally responsible in the Group (based on standards and policies, contracts, targets, red lines, remuneration) for dealing with the Regulator on the matters related to sustainability of transmission tariffs.

83. The members of the Market Research Unit usually participate in the Investment Committee of Naftogaz, and we often see that the model based on value creation and personal accountability is not properly realized (or it is often understood in a "corrupted" way). Among recent precedents we can mention the following cases:

- In an investment case of deep well drilling by Ukrgazvydobuvannya we saw problems with a decision-making based on *fact-based approach*. This project was preapproved by UGV and it was proposed by the Heads of Integrated Gas and Technical business units to drill wells without waiting for the results of 3D seismic in area, where only 1 of 11 exploratory wells was allegedly successful. Available to date seismic data was acquired during '50s, '80s and early '90s, thus it is of low quality, uninformative and inapplicable for modern computational geo-tools (available old-era 2D seismic data is outdated[46]). Initially there was a scenario intended to acquire modern 3D seismic data, to process it, to get new data and deeper understanding of best well locations and to decide on further exploration campaign, but such de-risking approach was rejected due to unknown reasons. The approach that was chosen and approved by UGV was aimed to speed up the exploration process keeping risks high, instead of drilling wells based on data-driven understanding of where to drill and how to minimize risk. Investment Committee of Naftogaz has approved drilling of one exploration well with 30+ mln USD budget based on old geo-data without any additional de-risking. During preliminary discussion and meetings regarding this exploration project, representative of Market Research Unit (I.Karpenko) raised this issue and stated that there is a strong need to switch scenario by acquisition of 3D seismic (aimed to de-risk the prospects) before the drilling. As a result of these discussions, only one member of Investment Committee supported our view not to vote for the proposed project implementation (among 10 members of this Committee and 30 members of Scientific and Technical Councils of UGV and Naftogaz). We describe details of this case in Appendix I.
- In an investment case of construction of a solar power plant "Chudniv" we have identified a significant difference between the amount of planned capital investment in the updated version of the project as of Jul'19 and the amount from the previous version of the project as of Feb'19. According to the updated plan as of July 2019, the amount of planned investments per unit of capacity increased by 52% in comparison with the initial plan, from $ 0.87 million per 1MW to $ 1.33 million per 1MW. Analysis of open sources shows that the cost of already implemented solar power plant projects in Ukraine in 2018-2019 was between $ 0.77 and $ 1.12 million per 1 MW (the median is 0.93), while cost per unit of capacity for the projects expected in 2019 is between $ 1.02 and $ 1.19 million per 1 MW (the median is 1.06). As a result of changes in the project, its NPV decreased by 43% or by UAH 237 million, while the discounted payback period (DPP) increased from 77 months to 100 months.

[46] Global industry of seismic acquisition and processing is making a technological breakthrough every half decade, so it's not conventional (according to current market practices) to use old 2D seismic data considered above

Figure 20. Capital costs per unit of capacity of solar power plants, USD mln/MW



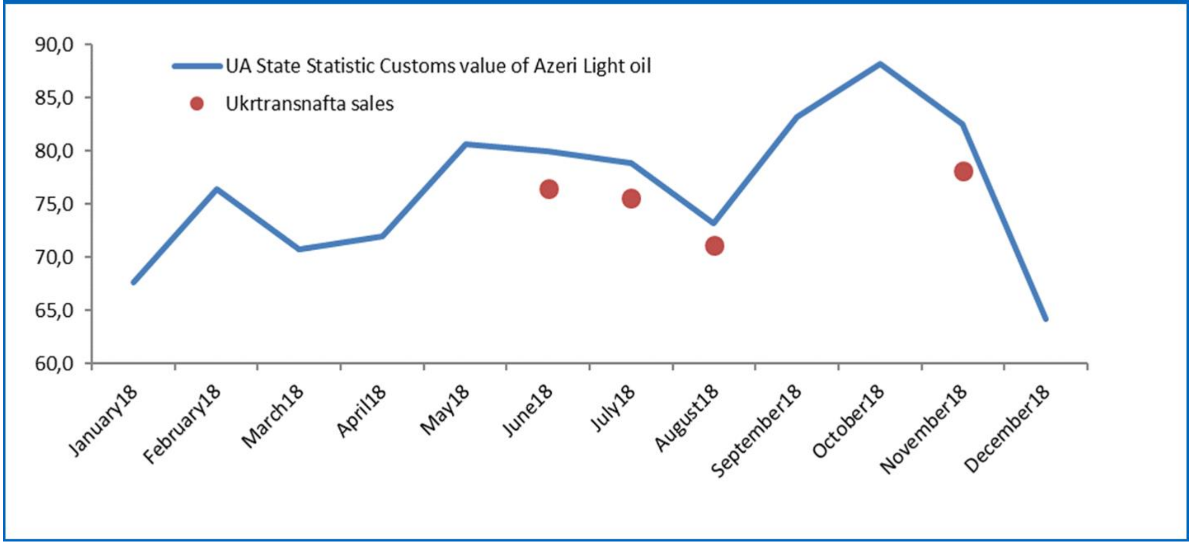
- In an investment case on improving the security of oil pipeline system we saw that *personal accountability* could be incorrectly understood, i.e. only in a sense of individual ownership of an asset/project, not in a sense of being able to explain the basis for key business decisions.

84. To sum up, we see cases when violation of "non-negotiables" is accepted and not punished on the level of the top team and below. Though there are cases when we've observed the opposite behavior[47], the importance of zero tolerance to violations of non-negotiables cannot be overstated. True living of Naftogaz values will help to develop an effective role model for its employees, when they translate declared Naftogaz's core values into what they do on a day-to-day basis. Without it the change is not possible, and the risk of "extend-pretend" or "status quo" scenario significantly increases.

85. We conclude this section with our observations of recent auctions on selling oil by Oil Mid- and Downstream business unit. As a result of underutilized oil transportation system, some volumes of crude oil that were previously used in transportation process were transferred to oil storages, and management has decided to sell these excessive volumes at market price. We've paid attention to this process because, in our opinion, it was not sufficiently transparent and consistent with the design principles of the transformation process. For the period of 2017-2019 Ukrtransnafta sold 265 thousand tons of crude oil, and Kremenchug refinery purchased 234 thousand tons from Ukrtransnafta. In 2018 Kremenchug refinery processed about 2.2 million tons of oil, of which 0.7 million tons of Azeri Light oil were imported for processing. It should be noted that oil sold by Ukrtransnafta in 2018 and 2019 was also mostly Azeri Light grade oil. Thus, we have analyzed the efficiency of sale operations of Ukrtransnafta by comparing selling price of its oil with import prices of Azeri Light oil – a proxy for opportunity cost of Ukrtransnafta's sales. As can be seen from the Figure 21 below, the sales prices of Ukrtransnafta's oil in 2018 (calculated based on their own pricing policy) were lower than prices at which the Kremenchug refinery has bought oil on the open market.

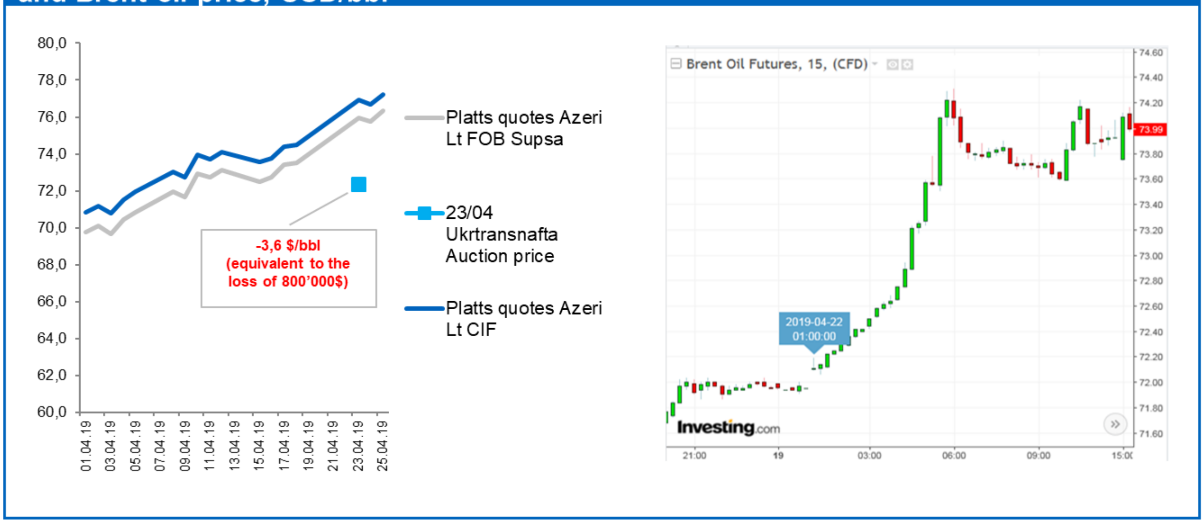
[47] In particular, the dismissal of the previous head of IT was because of the signs of corrupted procurement of ERP system.

Figure 21. Prices for Ukrtransnafta's oil and of imported oil with the same grade, USD/bbl



86. Considering the above, when sales of technological oil were resumed by Ukrtransnafta in April 2019, we have analyzed the level of the offered auction price in advance. We have revealed that the price for a lot of 30'000 tons was determined: (a) based on the principle of *export parity price* and (b) based on the average price quotation of Azeri Lt FOB Supsa *for the 15 calendar days preceding the date of registration* of the bid application for the auction[48]. At the same time, the price for oil has been gradually increasing in April 2019. Thus, the announced price of the auction was in advance below the market price (see Figure 22 below). On the day of registration of the bids world oil prices continued to grow (see graph on the right side[49] below), and these data could have been used by Ukrtransnafta to decide on the postponement of oil auctions or on the change in pricing mechanism.

Figure 22. Price for Ukrtransnafta's oil, import-/export-parity price and Brent oil price, USD/bbl



48 It was not consistent with international trading practices: in accordance with Platts methodology, daily spot assessment for Azeri Light FOB Supsa takes into account cargoes loading from the Black Sea port of Supsa for the typical pricing period for cargoes of either three or five days after bill of lading.

49 Based on data from https://www.investing.com/commodities/brent-oil-streaming-chart

87. We also see that the chosen mechanism of oil sales could have been prohibitive for competition:

- From technological point of view, there are only two ways to load oil in MNT Pivdenny. The first way is to load oil to a tanker and the second way of shipment is to transport it by a pipeline that connects the oil transshipment complex with the only operating refinery in Ukraine owned by Ukrtatnafta. Thus, de facto the number of potential buyers was initially narrowed down to two categories: (a) buyers for further exports by sea; (b) Ukrtatnafta.

- When considering the first category (buyers for further exports by sea), it should be noted that the use of FOB Supsa quotes for pricing purposes implies shipping of at least 80 thousand tons of oil[50]. Volume of 30 thousand tons of oil (offered for sale by Ukrtransnafta) is not a standard export lot, which in turn entails additional logistic problems and costs for the potential buyer, reducing his interest in participation in the auction. It should be noted that in the Resolution of the Shareholder dd April 22, 2019[51] a permission was granted for Ukrtransnafta to sell 100 thousand tons of oil without requirements to split these volumes into smaller lots[52].

- Furthermore, we saw several indications of no clear mechanism for the participation of non-resident companies in the abovementioned oil sales auction. For example, setting the auction price only in national currency implied that non-resident companies had to open a bank accounts in Hryvnia – given that there were less than two days from the moment the auction was announced[53] until the payment date, it is questionable whether non-resident traders were able to do that[54]. Also, due to the fact that the auction documentation has not provided for detailed mechanism of exporting oil to non-resident companies, there were controversial issues regarding the treatment of VAT[55].

88. Our calculations and questions about such pricing policy were sent by e-mail to the Head of Oil mid- and downstream on the day before the auction, and as far as we know the selling department of this unit was informed about our concerns. But we have not received any response and we have not seen any other actions to change the situation. On April 24 the entire volume of Azeri Light oil was sold[56] at a price lower than market price, and at least USD 0.8 mln[57] were lost for Ukrtransnafta because of the chosen pricing mechanism. When we have asked the Head of Oil mid- and downstream about the reasons of such difference and why they have not taken into

[50] Platts typically uses freight rates of 80,000mt cargo (standard Aframax) to provide a guidance for the FOB level

[51] https://www.ukrtransnafta.com/wp-content/uploads/2019/04/2019.04.22_%D0%A0%D1%96%D1%88%D0%B5%D0%BD%D0%BD%D1%8F-%E2%84%96250-%D0%BF%D1%80%D0%BE%D0%B4%D0%B0%D0%B6-%D0%BD%D0%B0%D1%84%D1%82%D0%B8-100-%D1%82%D0%B8%D1%81.-%D1%82%D0%BE%D0%BD%D0%BD-%D0%90%D0%B7%D0%B5%D1%80%D1%96.pdf

[52] Also, to our knowledge, there are no technical or economic restrictions for transportation of larger volumes by oil pipeline (i.e. 100'000 instead of 30'000 mt).

[53] The auction was announced on April 22 at 18:00 (https://www.ueex.com.ua/presscenter/news/tb-ukrainska-energetichna-birzha-24-kvitnya-2019-roku-o-1600-pro/)

[54] In accordance with the "Instruction on the procedure for opening and closing accounts of bank' clients and correspondent accounts of resident and non-residents banks " approved by the Resolution of the National Bank of Ukraine dated November 12, 2003 No. 492, for opening a bank account a non-resident company must provide copies of legalized and apostilled Company Constituent Documents, power of attorney and other documents https://zakon.rada.gov.ua/laws/show/z1172-03#n2278

[55] According to Art. 195 of the Tax Code of Ukraine, there is zero tax rate for the exports of goods, but according to the announced terms of Ukrtransnafta's oil auction the buyer was obliged to pay price including VAT.

[56] https://bets.ueex.com.ua/public/PositionList.aspx?id_auc=3187640&view_type=results&lan=ua

[57] USD 0.8 mln were calculated based on a difference between auction price and export-parity price

account facts provided by us, he said that selling oil is not a part of their business, and deviations of auction price from market price could really happen because of that.

89. In this case a quite significant value was lost for the Group as a result of just one operation because the decision-making was not based on a fact-based approach, in violation of the "non-negotiables" mentioned above. As far as the commercial team responsible for the auction was aware of these consequences and has not rationally explained their reasons to act in the way they did, this situation also demonstrates a violation of "Conscientiousness" value of Naftogaz Group.

90. One may say that the issue related to oil sales by Ukrtransnafta to Kremenchug refinery could go beyond the problems of Naftogaz's current scope of business. The existence of just one potential buyer of oil and interconnections between Naftogaz Group and Ukrtatnafta may be an evidence of a more complex problem of vertical integration in oil sector. Currently Naftogaz de facto pretends that such problem does not exist, but given that transformation was intended to capture synergies from being horizontally and vertically integrated, this problem cannot be ignored and "extended".

c. Conformity of approved business plans with original goals and principles of transformation.

91. One of delayed but obvious results of Naftogaz's transformation was a delivery of business plans for Integrated Gas and Oil Mid- and Downstream divisions[58]. Almost all of our interviewees told that creation of these divisions and approval of business plans were a key achievement of organizational transformation so far. Business plans were approved by the Supervisory Board in Q1'19, and accountable heads of these divisions committed to be responsible for the implementation of these business plans.

92. Though we appreciate a progress with creation of abovementioned divisions and specification of their value agenda, we have found some troublesome inputs and approaches in business plans, which give us reasons to be concerned. In respect of business plan of Integrated Gas, we have the following key concerns:

    A. **It is highly probable that production target for 2019 from the business plan will not be met**[59]. We see that gas production is currently decreasing despite a significant inflow of investments in the previous years and in Q1'2019. The daily gross production volume in Q2 2019 was down compared to Q1 2019: one may say that it is caused by seasonality, but in July 2019 it has already dropped to the level of 2016. If this trend continues, it would be impossible to achieve 213 MMcm growth in gross production expected in business plan[60]. It's not only the case for gross gas production:

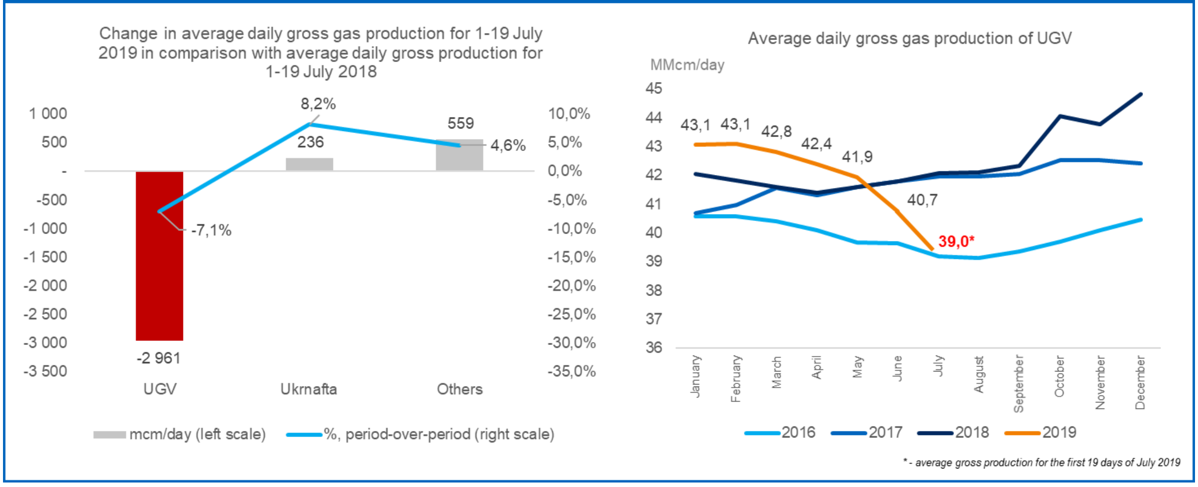
[58] We should admit that the choice of such name as "division" instead of "business" contradicts the original idea of nudging accountable leaders (heads of divisions) to treat end-to-end value chains as businesses for which they are responsible. Together with orientation on value creation in performance management it should have created an entrepreneurial way of thinking by the leaders, maximized accountability for results and aligned leaders' and shareholders' interests. In this respect we recall the first public appearance of Mr.Favorov as a Head of Integrated Gas in December 2018, where he said that he was neither a "public servant" nor a "businessman", but he was a "manager" . It could be a sign that heads of divisions do not treat their assets as businesses.

[59] We were informed that business plan of Integrated Gas business was updated in June 2019, but when writing this report, we were not provided with this updated version.

[60] In Jan-Jun 2019 gross production by UGV was 111 MMcm higher than in Jan-Jun 2018, but in the first 19 days of July 2019 total gross production is 56 MMcm lower than for the first 19 days of July 2018. June 2019 has become the first month for the last 38 months when there was a year-

- the commodity volumes of produced gas have also decreased in 1H 2019 compared to 1H 2018 by approximately 100 MMcm (if adjusted for the effect from JA agreements);
- according to our estimates, commodity volumes in July 2019 could decrease by another 70 MMcm if compared with July 2018 (or by 35 MMcm if compared with June 2019). Based on our interviews, we also saw signs that a situation with gas production could become worse in the near future (e.g. because of mistakes in appointments, risks of inadequate managerial decisions and decrease in number and quality of operations).

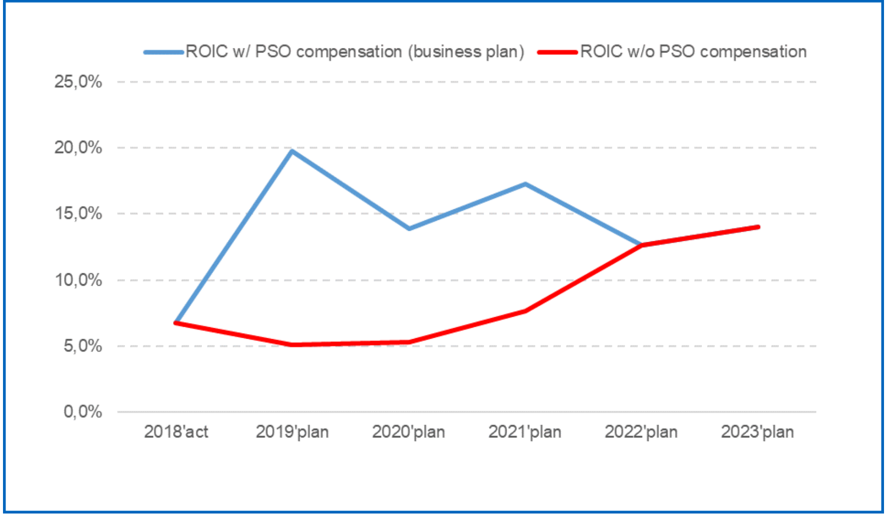
Figure 23. Change in average daily gross gas production



B. According to the business plan it is expected that PSO compensation in amount of UAH 160 bn will be received by the Company in 2019-2021 (UAH 69 bn in 2019). But when ROIC is calculated, **the amount of outstanding PSO compensation is not taken into account as company's asset**. It is also questionable whether it is fair to include PSO compensation in results of Integrated Gas division if Naftogaz receives such compensation on the basis of a deal on Ukrnafta's debt settlement (where the Head of Integrated Gas was not involved) – nothing is said in the business plan about that. It is also notable that with the adjustment for PSO compensation ROIC of Integrated Gas Business will be lower than the cost of capital used in the business plan (15.1%).

over-year decrease in gas production. Management should be ready to explain this trend because information on gas production is a public one, but we see manipulations with publicly disclosed reasons behind such decrease from Naftogaz's side.

Figure 24. ROIC of Integrated Gas Business, %



C. It is expected in the business plan that approximately 4.4 bcm of gas will be withdrawn from the decommissioning of three gas storages. But when ROIC is calculated, the **value of this gas (or value of respective gas storages) is not is taken into account in calculations**.

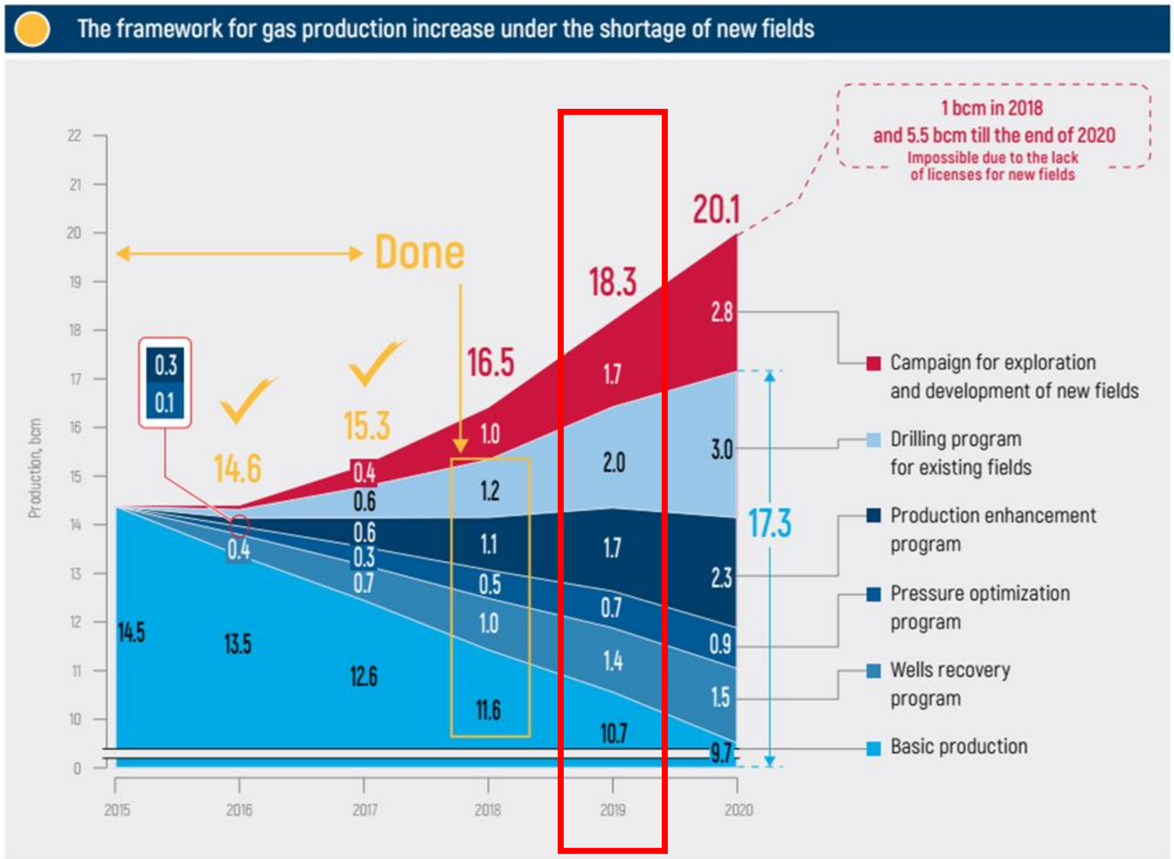
D. Based on factual data for the first half of 2019, we saw a **worsening of payment discipline of Naftogaz's customers in sales to residential segment** (sales to regional supply companies and supplies to heat generating companies), while in business plan it was expected that payment discipline will be the same as in 2018.

E. It is questionable whether the **reclassification of unauthorized offtakes losses to Transmission & Storage** was a pragmatic approach – first, because of the reason provided in the next paragraph, and second, because there is a risk that Naftogaz will be liable for these offtakes if UTG loses in legal battle against regional gas distribution companies on this matter.

F. As we describe in previous sections, it is **questionable whether Gas Transmission&Storage should not be included as a cost center in Integrated Gas Business**. We've already said that a choice of leaving this segment behind the brackets because of TSO unbundling in 2020 contradicts Naftogaz's corporate strategy – so a natural choice could have been an inclusion of this segment as a cost center in Integrated Gas business. Nothing is said in the business plan about initiatives for storages (except for decommissioning of three of them), which are expected to stay with Naftogaz's group even after TSO unbundling. The natural choice for gas storages could have been their inclusion in this division because of synergies with gas upstream and trading.

93. In respect of falling gas production we should mention another observation. Though many mass media put a question on reasons behind a decrease described in paragraph 92.A, we see that manipulations are used by Naftogaz in its communications on this topic. For example, during recent public interview of A.Kobolyev he said that corruption in allocation of special permits caused a decrease in production, with Naftogaz not being able to produce gas from new fields. But we see that gas production currently expected in 2019 is lower than previous expectations, even

we do not take into account production from greenfields. For example, if we look at a graph on page 23 of Naftogaz's 2018 Annual Report[61], we see that exclusion of development of new fields should result in production of 16.6 bcm in 2019, which is more than 1 bcm higher than current expectations for this year.



Source: Ukrgasvydobuvannya

In another piece of communication UGV has said that there was a 50 MMcm increase in commodity gas production in H1'19 compared to H1'18. But if these volumes are adjusted for the effect from JA, the result will be the opposite – volumes of commodity gas before deduction of JA volumes were approximately 100 MMcm lower in H1'19 if compared with H1'18, and recent trend for June-July 2019 shows further decrease. Such manipulations and silence surrounding this problem poses significant risks for the reputation of Naftogaz. Given that Naftogaz has recently issued Eurobonds, non-disclosure of this information in prospectus and roadshow presentation poses legal risks on top of reputational ones, also violating "fairness" and "openness" values of Naftogaz.

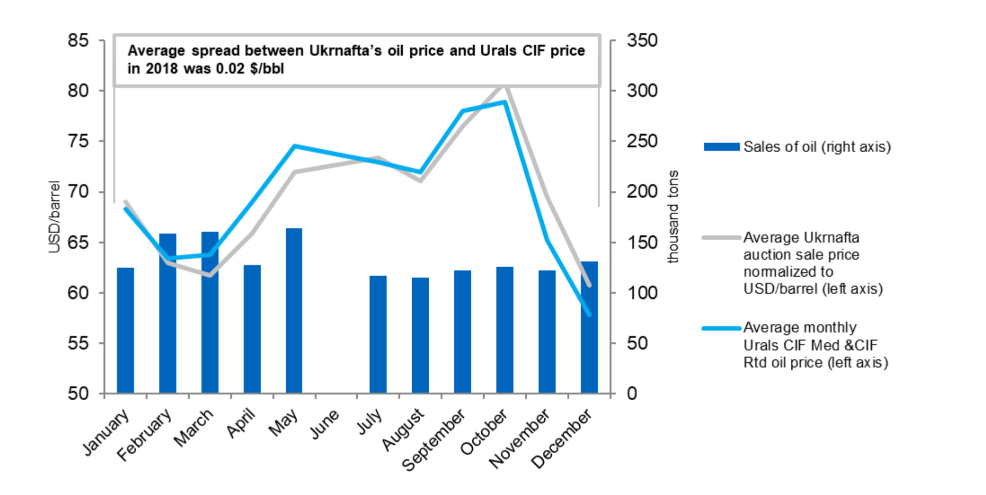
94. In respect of business plan for Oil Mid- and Downstream we have the following key concerns:

A. The transfer of condensate and oil between Integrated Gas division and Oil Mid- and Downstream divisions takes place according **to the export parity price for oil.** When the concept of P&L accountability was developed in May 2018, it was decided to use market prices (where they exist and where they are reliable) as a basis for transfer prices between business units. At the current moment market prices for oil in Ukraine reflect import-

[61] See page 23 here: http://www.naftogaz.com/files/Zvity/Annual-Report-2018-engl.pdf

parity price: (a) the starting price at Ukrnafta's auctions for crude oil (~65% of oil supply in Ukraine) is determined according to import parity; (b) our understanding is that private companies also sell oil at import-parity price; (c) Ukraine is a net importer of oil: officially crude oil in Ukraine is refined only by Kremenchug refinery, out of 2.2 million tons of oil refined by this plant 0.7 million tons of oil were imported for further processing. Therefore, our opinion is that opportunity cost of oil and condensate for Integrated Gas division at the moment should be the import-parity price instead of export-parity price. When asking about the reasons behind using export-parity price for the transfer of condensate and oil between divisions, we've received an explanation that using import-parity price will lead to the closure of Shebelinka plant (allegedly according to the calculations by Oil Mid- and Downstream team). From our point of view, it is an example of corrupted approach based not on factual evidence, with artificial underestimation of division's costs, and using it violates the "Conscientiousness" value.

Figure 25. Comparison of Ukrnafta's price and import-parity price in 2018

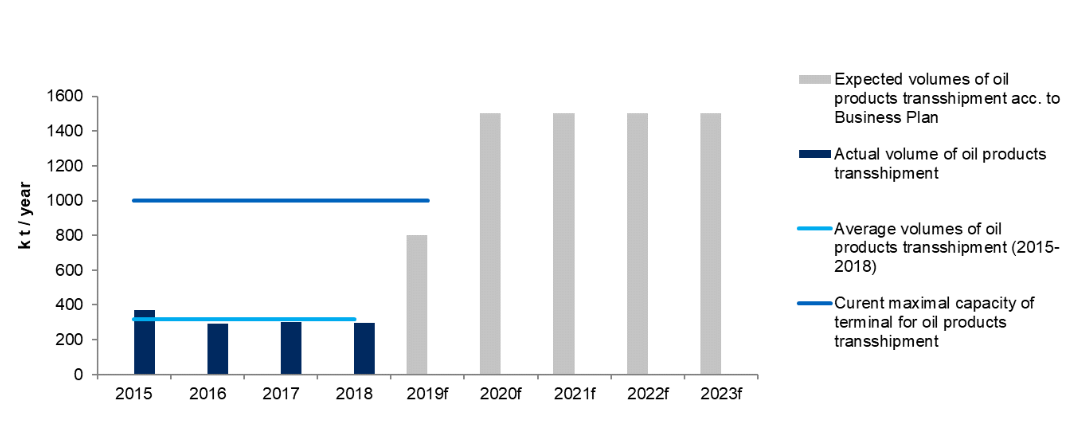


B. The initiative for diversifying the sources of supply of petroleum products to Ukraine envisages the acquisition of property rights for an active transshipment complex located in the immediate vicinity of MNT "Pivdennyy". According to this initiative, it is expected to handle activities on oil products transshipments in a volume of 800 thousand tons already in 2019 with a further increase to 1.5 million tons in 2020. Analysis of actual volumes of oil products transshipment of the MNT "Pivdennyy" shows that over the past 4 years the average volume of transshipment of petroleum products was about 300 thousand tons. Thus, implied expectations regarding 5x increase in the volume of transshipment of oil products should be based on the research on why such significant increase is possible – but we have not found such description in the provided files, therefore this initiative could hardly be a pragmatic one. Moreover, according to data of Ukrainian Sea Ports Authority volumes of transshipment of petroleum products by stevedoring companies in Pivdennyy seaport decreased by 40% in January-April 2019, from 76 thousand tons to 46 thousand tons.[62] When we had an interview with the Head

[62] http://www.uspa.gov.ua/en/performance

of Oil mid- and downstream, he said that he is not ready to explain these expectations, but he would do that only when this project will be presented on the Investment Committee of Naftogaz.

Figure 26. Actual and planned volumes of transshipment on MNT "Pivdennyy"



d. Evaluation of existing approach to measuring transformation's progress

95. One of key takeaways of top team workshop in May 2018 (on the start of transformation) was that a change journey is a rigorous process, where one should start with a clear aspiration of where the organization should head and why. That means developing clear, stretching targets – as evidence suggests, chances of success for transformations investing in fact-based diagnostic of their performance increase significantly. The literature says that it is critically important to set **clear unambiguous metrics/milestones** and to **rigorously track progress of transformation** (see Figures 27 and 28 below). Historically organizations with no well-developed system to track own performance failed 7x more often.

Figure 27. % of transformations that were very or extremely successful

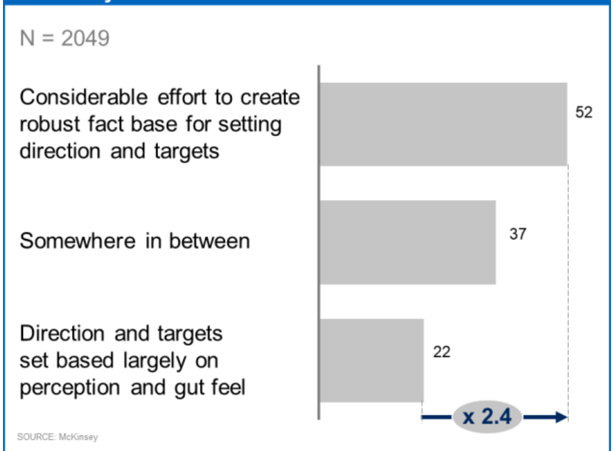
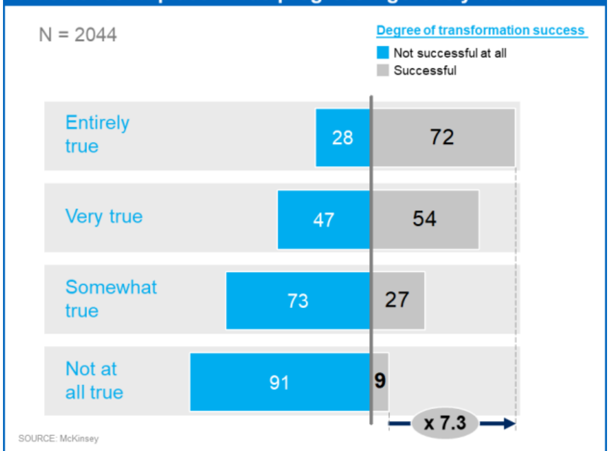


Figure 28. Were there a clear, unambiguous metrics and milestones in place? Was progress rigorously tracked?



96. We have not confirmed the existence of such evaluation process in Naftogaz. Though we acknowledge that there was one OHI survey in Autumn 2018, one top team effectiveness survey

in January 2019, a developmental assessment of the top team and assessment of transformation of HR processes (see Appendix II), in our view it could be insufficient for the rigorous tracking of transformation progress.

97. We understand that in Q3'2018 there was a workstream on development of a system of business analytics, that should have tracked quantitative performance indicators of the Group on a daily, weekly, monthly or quarterly basis, and both Naftogaz's transformation office and our Unit were approached to provide a suggestion regarding a list of indicators then. But this project was not implemented, and there is no such system in place at the moment. When we've asked why the development of this "dashboard" project was stopped, one interviewee said that it was a fault of consolidated reporting division, while other interviewee said that consolidated reporting division was not provided with the explanation of who would be the users of such system, and its development was abandoned.

98. To our understanding and based on the interviews with Naftogaz's TO, currently transformation is evaluated only from the side of getting deliverables (e.g. business plans, organizational structures) in time[63]. For example, when we have asked about a document showing a transformation progress in April 2019, we were provided with a presentation on two pages, with a short description of ongoing workstreams (see Appendix III).

99. Given that we have not seen a system of tracking performance of transformation, in the next two sections we:

- present a list of quantitative and qualitative data chosen as Naftogaz's business performance indicators in autumn 2018 (as of September 2018 it was expected that these indicators will be used to evaluate progress of transformation on a quarterly basis);
- look at cases that were positioned by the management as successful stories of organizational transformation.

100. During our interviews it was also discovered that top team feels a needs for a detailed updated plan of organizational transformation. One interviewee said that there was no "charter" of transformation process that would serve as a basis to compare factual and expected results of transformation, where clear priorities, roles and responsibilities for the transformation process are set. Another interviewee said that transformation process was not well organized, capacities of Department of Strategy of Naftogaz were and are not enough to perform all the tasks for which they are accountable, and the staff of TO is overloaded with other functions not directly linked with transformation.

101. Recent audit of organizational transformation held by internal audit service of Naftogaz in May-June 2019, has also showed that there is a need for an internal charter on transformation. In this respect we recall that during a workshop in May 2018 McKinsey team have communicated that transformation process should have a clear structure, where roles and responsibilities were clear, and people felt accountable (see figures 29 and 30 below). Therefore, we cannot firmly say that such charter is not needed.

[63] One may say that tracking of transformation process could be done through OKR system, but this system should still be implemented. For example, during recent workshop it became evident that it is not clear who should calculate and check factual results achieved by business leaders.

Figure 29. Was transformation organised into a clear structure?

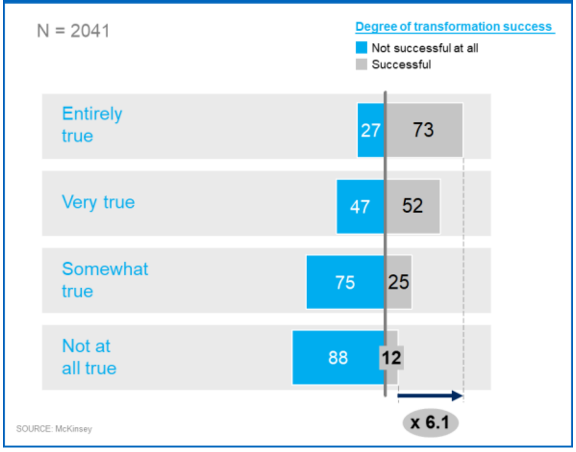
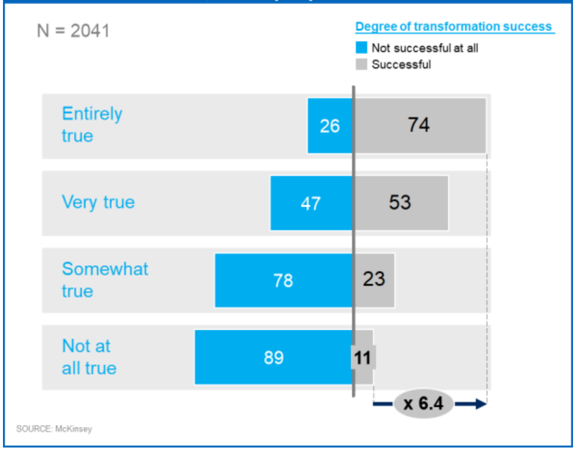


Figure 30. Were roles and responsibilities in transformation clear, when people felt accountable?



e. **Assessment of quantitative indicators.**

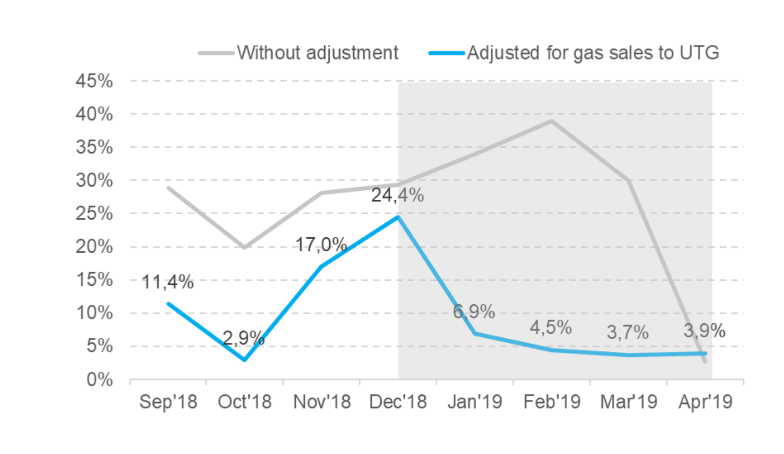
102. In Appendix IV we provide a list of quantitative results that could be used as a basis for regular monitoring of effect from transformation on Naftogaz's business performance. These data demonstrate that one of the key pain point for Naftogaz, ROIC lower than its cost of capital, hasn't gone anywhere. Though there was an increase in ROIC in Q1'19 in comparison with Q1'18 (7.5%[64] vs 5.9%), with the adjustment for the increase in transit revenues ROIC for Q1'19 (6.0%) would be almost the same as in Q1'18 (5.9%).

103. Data in Appendix IV also shows the following trends:

- Selected indicators confirm that Naftogaz still faces critical market failures that should be mitigated (increase in % of non-payments with a questionable decrease in number of subsidy recipients, increased amount of hidden subsidies in 2018, share of regulated gas sales market is still more than 50% etc.)
- There are such negative trends in Naftogaz business performance as decreasing gas production despite a significant inflow of investments, decrease in market share in non-regulated segment of gas sales, decrease in volumes of oil transit. As regards the decrease in market share in non-regulated segment of gas sales we have additionally made an assessment of Naftogaz's market share on a monthly basis. Data below shows essential decrease in Company's share starting from December 2018 (if it is adjusted for intragroup gas sales to UTG):

[64] This calculation does not take into account effect from potential revision of approach to bad debt reserves on gas sales to regional supply companies, which could have a negative effect for Company's ROIC.

Figure 31. Naftogaz's market share on unregulated market, %



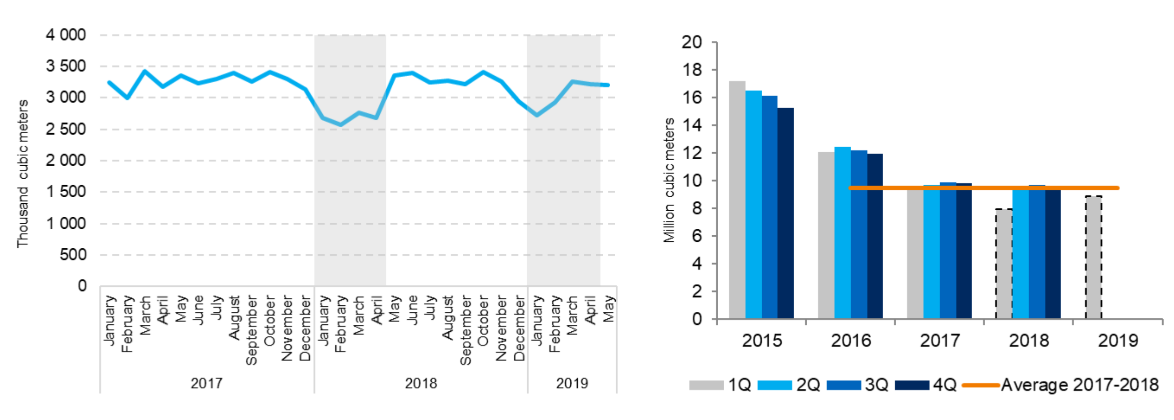
- Improvement of some indicators in upstream segment can be an evidence of developing Naftogaz's capabilities in exploration, production and field services (increased volumes of 3D seismic works and RRR, increase in number of modernized rigs, drill rig speed and number of WO&HF operations), with consequential pressure on costs (increase in cash costs per unit of gas produced, drilling costs). This is a positive sign, because one of the goals of transformation was to close a gap between Naftogaz's and peers' capabilities.
- Improved cost efficiency in oil midstream.

104. As we've said above, on top of analysis of presented indicators we also look at some case studies. According to its public announcement, Ukravtogaz increased sales of compressed natural gas in February 2019 by 14% y-o-y[65], with further expected increase in a range between 20% and 30% (as announced). Since this event was presented by Naftogaz's CEO as a "*first successful result of transformation process*"[66], we have looked at the details of this growth. In Ukravtogaz's press-release it was announced that the growth is explained by the improvement in company's management system, but our analysis shows that there could be other reasons behind abovementioned increase in sales:

A. Year-over-year increase in Q1'19 sales was calculated based on low volumes of Q1'18 sales (see Figure 32 below). We cannot say that low sales volumes in Q1'18 in comparison with Q2-Q4'18 were explained by seasonality, because first quarter sales in previous years were not significantly lower than sales in the rest of the year. In fact, in some years they were even higher:

[65] http://ukravtogaz.com/news/onovlennya-sistemi-upravlinnya-dp-ukravtogaz-pershi-dosyagnennya-ta-rezultati.html
[66] https://www.facebook.com/788303439/posts/10156479038743440?s=100003948330769&sfns=mo

Figure 32. Ukravtogaz's monthly and quarterly retail sales volumes



B. When investigating the causes of low sales in Q1'18 we have found the following data:

a) In the beginning of 2018 Ukravtogaz faced anticompetitive actions from regional distribution companies that have temporarily blocked gas supplies to some of Ukravtogaz's CNG stations (see Appendix V).

b) Another possible reason for low Ukravtogaz's sales in Q1'18 (and preceding period of November-December 2017) is a widening spread between Ukravtogaz's CNG price and price of alternative fuel, i.e. retail LPG price. As shown in Figure 33 below, this spread has started to widen in October 2017, and, to our knowledge, some consumers of CNG were able to switch to LPG. Notably, in May'18 Ukravtogaz significantly decreased their selling price, the spread with LPG prices has switched to negative (as also shown in Figure 33 below) and Ukravtogaz's sales have recovered (+25% if compared to Apr'18).

C. These data suggest that an assertion about a causal link between improvement in company's management system and Q1'19 sales growth could be false. In this context we should also note that in the last two months there was a decrease in Ukravtogaz's sales, by 4.6% in May 2019 if compared to May 2018 (or -0.7% if compared to Apr'19) and by 10.4% in June 2019 if compared to June 2018 (or -5.0% if compared to May'19), as shown in Figure 34 below. When we've asked the Head of Oil mid- and downstream about reasons behind this decrease, he said that sales volumes are currently adjusting for volumes that were previously reported as stolen. We have not found this explanation convincing, because if some volumes are stolen, it was not possible to show them as commodity volumes in management reporting (i.e. prevention of thefts can decrease technical losses and increase sales volumes, not decrease sales volumes).

Figure 33. Change in prices for LPG and CNG in Oct'17-May'18

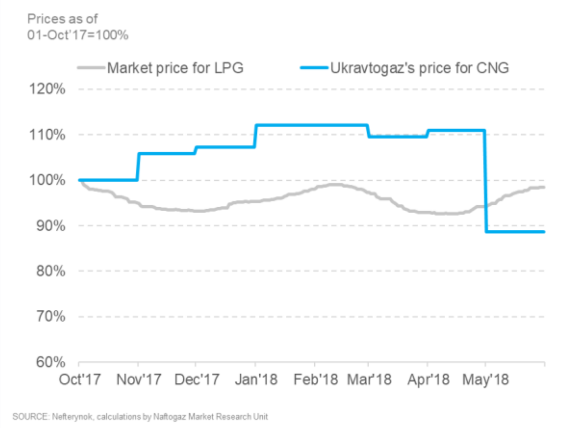
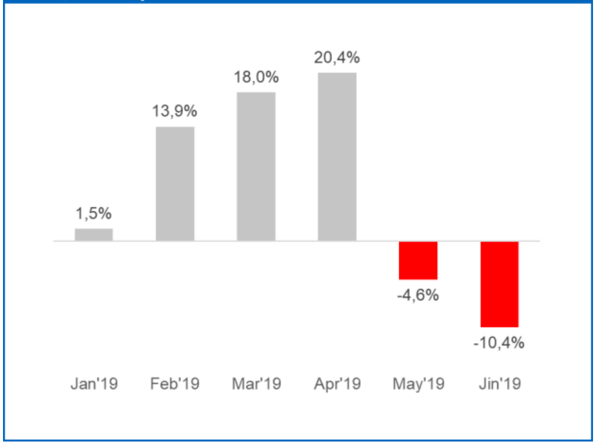


Figure 34. Change in Ukravtogaz's sales volumes in 2019, in comparison with the same months of 2018



f. Assessment of qualitative indicators.

105. It was decided in summer 2018 that key gaps versus best practices should be identified in Naftogaz and high-level plan to close these gaps should be developed. We have tried to estimate whether these gaps are narrowed by using an assessment of selected Naftogaz's principal activities & corporate functions (in comparison with leading practices) made in September 2018. We have updated this assessment as of June 2019 and present the results in Appendices VI and VII based on our knowledge and data received on request from other divisions of the Group.

106. We understand that assessment by several analysts is not a sufficiently rigorous approach, and a bunch of other methods should be used for this purpose (e.g. surveys, expert calls for each of activities, consultancy review based on database with best practices, workshops). Therefore, we propose to treat this assessment as our hypothesis that could be adjusted based on information not available for us when this report was prepared.

107. Our assessment shows the following trends:

- There were improvements of principal activities in upstream (so evidence from assessment of upstream-related business performance indicators is additionally supported by this information) and in such function as procurement.
- We saw negative changes in corporate governance caused by "rollback" in its reform in Naftogaz this year.
- Based on conclusions of forensic study by KPMG[67], we have put a wider gap for "Gas Imports and Trading" activity.
- There were no or minor improvements in other areas, at least we have not encountered such.

108. To sum up, our conclusion is that general progress of improvement in the efficiency of Naftogaz's principal activities and functions is a marginal one. As of July 2018 it was expected that organizational transformation should provide a ground for more noticeable results.

[67] According to the report, "*under the back-to-back sales, NAK Naftogaz's pricing was managed and controlled in a manner in line with accepted industry practices*", but adequacy of controls for its current trading activities is questionable.

Appendix I. Investment case on deep exploration at Shebelyns'ke gas field

1. UGV have initiated investment project to explore hydrocarbon potential of deep Carboniferous horizons of Shebelynske gas field. Due to high budget and high risks UGV has submitted this case to the Investment Committee of Naftogaz. Deep prospects at Shebelynka field could be considered the best undrilled prospect in exploration portfolio of UGV, with total cumulative gas resources of all deep blocks estimated at 64 bcm (P50).

2. Historically, UGV has drilled 11 deep exploration wells within Shebelyns'ke field from 1950 till mid '00, and all of them appeared to be dry (no gas was discovered). In fact, all wells at deep Shebelynka gas field have not led to expected discoveries – it means that all pre-drill forecasts and expectations were wrong. Only one deep exploration well[68] allegedly (according to UGV) had gas shows and significant absorption of drilling mud, meaning the existence of fractured formation – thus UGV aimed to drill new proposed deep exploration well[69] just nearby. Available to date seismic data was acquired in several stages during '50s, '80s and early '90s, thus it is of low quality, uninformative and inapplicable for modern computational geo-tools (available old-era 2D seismic data is outdated[70]).

3. Initially UGV had a number of scenarios on how to run this exploration project, but the final version that was approved at UGV level and submitted to Naftogaz was intended to drill two deep exploration wells with 45+ mln USD budget without additional geological de-risking, meaning that acquisition of 3D seismic will start only after the drilling of exploration wells. Initially there was a scenario intended to acquire modern 3D seismic, to process it, to get new data and understanding of best well locations and to decide on further exploration campaign, but such de-risking approach was rejected due to unknown reasons[71]. The approach that was chosen and approved by UGV was aimed to speed up the exploration process keeping risks high, instead of drilling wells based on data-driven understanding of where to drill and how to minimize risk. The Investment Committee of Naftogaz approved drilling of one exploration well with 30+ mln USD budget based on old geo-data without any additional de-risking. During preliminary discussion and meetings regarding this exploration project, representative of Market Research Unit (I.Karpenko) raised this issue and stated his concerns that there is a strong need to switch scenario by acquisition of 3D seismic (aimed to de-risk the prospects) before the drilling. As a result of these discussions, only one member of Investment Committee supported our view not to vote for the proposed project implementation (among 10 members of this Committee and 30 members of

[68] #800

[69] #888

[70] Global industry of seismic acquisition and processing is making a technological breakthrough every half decade, so it's not conventional (according to current market practices) to use old 2D seismic data considered above. Exploration business worldwide is linearly associated with large investments and huge risks; therefore, every company in this business struggle to minimize risks. On average, 70% of exploration wells are dry, making exploration investments a 'gamble-like' business. Best practices show that improper de-risking methodology, over-optimism and underestimation of uncertainties (in this particular case - geological uncertainties) typically results into unreliable predictions and incorrect investment decisions. De-risking of any exploration projects is a mixture of acquisition and processing of additional geophysical data (seismic, gravity), applying various modeling and computational methods aimed to get better subsurface imaging and more detailed understanding of subsurface environment, contracting several geo-data interpreters (experts) to get different opinions and more reliable basis for decision. Hundreds of consulting companies worldwide are developing new software geo-tool to better understand the sub-surface environment to manage the geological uncertainty and risks.

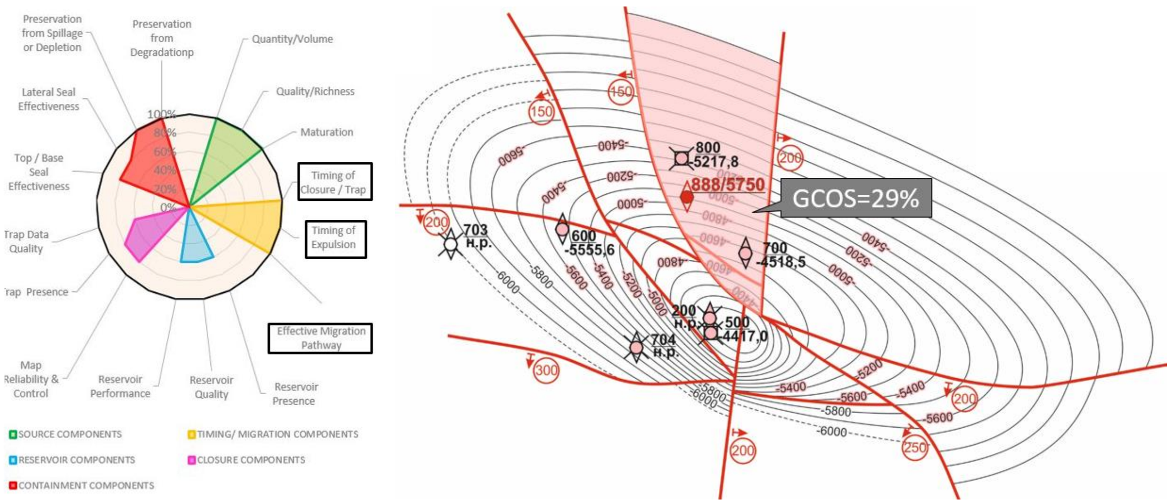
[71] Some people behind this project says that A.Kobolyev likes this initiative, therefore it should be implemented as soon as possible

Scientific and Technical Councils of UGV and Naftogaz). Head of Divisions have demonstrated that they are interested in implementation of this risky project without amendments, quoting their KPIs during discussions with us[72].

4. Overall, we recognize high unmanaged risk of this costly project, as 11 previous exploration wells were dry and no new geological data was acquired, no modern computation geo-modeling approaches were applied to manage the geological risk. But Scientific and Technical Council of UGV (with about 10 executives) approved this project for the implementation; later on, Scientific and Technical Council of Naftogaz HQ (with 10 internal and 10 external experts) also approved this project.

5. Moreover, Geological Chance of Success for this project is estimated at 29% by UGV (GCOS is a standard exploration metric to value probability of discovery), and it could also be overestimated. GCOS is a combination of risk factors, and in this particular case "Timing" factor is neglected and is set as 100% certainty[73] (Fig. 1 below). All deep prospects at Shebelinka are controlled with faults (red lines on Fig. 1 below), but the question "*When the faults appeared: before gas accumulations of after?*" remains unresolved and set as 100% certainty like there is no such risk. If faults appeared later than gas accumulations, it means that all gas migrated upwards and the deposits are destroyed. This scenario matches results of 11 previous exploration wells, which are dry without discoveries of commercial gas accumulations. In addition, data on source rocks, its quantity, quality and maturation are set as 100% certainty that there is no risk in this area (green segment on fig.1), because UGV got no information about that[74].

Figure 1. Geological factors to determine Geological Chance of Success for drilling deep exploration well #888 at Shebelyns'ke gas field. Timing factor and Source components are incorrectly set at 100% certainty



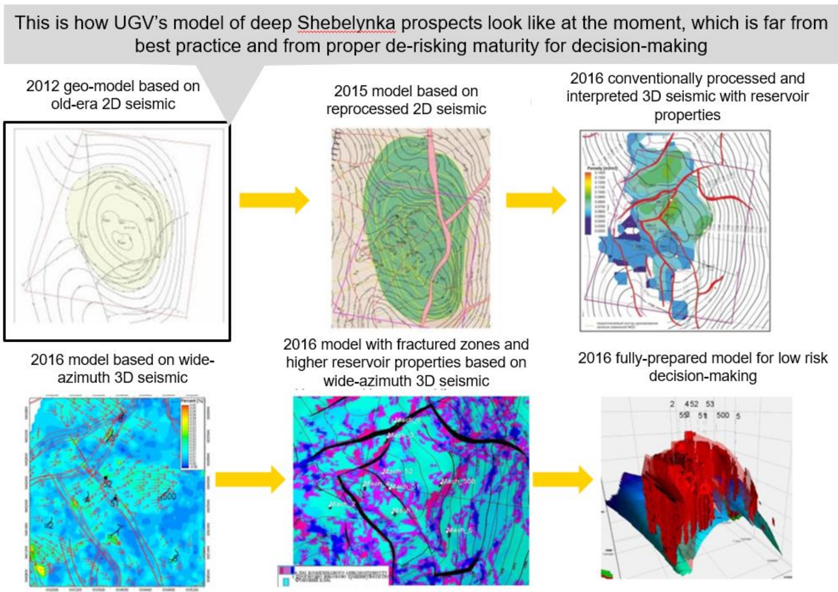
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[72] We've confirmed that well #888 is really in OKR list of A.Khomenko (though he names that "KPI" instead of "OKR")
[73] Meaning that there is no risk associated with Timing
[74] In fact, UGV has no geochemists, basin analysts or even professional exploration geologists; all UGV's geologists are professional development geologists, but it is a far different specter of disciplines, goals, tools and approaches.

6. We agree on significant undiscovered gas resources associated with deep Carboniferous horizons under giant Shebelynka sub-salt accumulation. We also agree that targeted Carboniferous formation are highly-productive within few dozens of other fields. But we think that de-risking maturity of Shebelynka deep prospects is not ready yet for the investment decision on costly exploration drilling. We see one of scenarios prepared by UGV on how to run this exploration project as correct, the one with proper de-risking approach where exploration drilling comes only after modern 3D seismic acquisition and its full processing and interpretation. But the one approved by the Investment Committee, where exploration drilling comes ahead of the seismic acquisition, is a direct indicator of decision making based on lack of data and lack of modern technological, intellectual and computational tools to reduce the risk and to increase probability to discover hydrocarbons. We recognize that UGV managed technological risk using best practices by attracting Schlumberger as a full-scale drilling contractor with a set of high-tech equipment to reduce technological risk of improper drilling, risk of mud intervention and risk of failed completions. But the geological risk remains unmanaged and neglected in order to unreasonably speed up the process.

7. **Analogous exploration cases.** In 2000s UGV had such upstream asset as Machukhske gas field. UGV drilled 7 deep exploration wells there in 1980-'90s based on old-era 2D seismic lines, without computational or intellectual approaches or tools to reduce geological risk. All wells were dry with no commercial production due to geological reasons and due to poor drilling techniques. Today DTEK Naftogaz is managing this asset. They applied the proper methodological approach (Figure 2 below): acquired wide-azimuth 3D seismic, attracted 3 independent London-based and Houston-based consulting companies to process and interpret seismic data, matched 3 independently-obtained results and drilled deep exploration well based on such data-driven approach. The initial gas rate of the first well was 1 million cubic meters per day, and after three years of production this well is still producing 700 ths. cubic meters per day. Estimated ultimate recovery of this well could reach up to 2 bcm. Now DTEK is drilling 2 new exploration wells at this asset aimed to test blocks separated by impermeable faults.

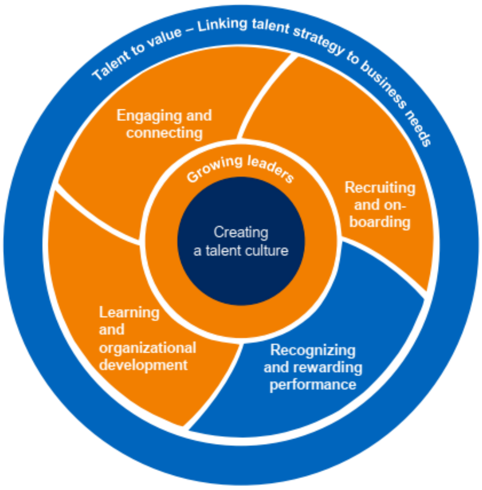
Figure 2. Evolution of geo-model of Machukhshke gas field in exploration portfolio of DTEK Naftogaz.



Appendix II. Monitoring of transformation of HR processes in Naftogaz Group (as of February 2019)

Transformation of HR processes and contents has started

Started, but requires scale up — Areas for attention to improve organizational health



Implementation status at major BUs

Legend: Implemented (green) — On the stage of implementation till the end of 2018 (yellow) — To be implemented in 2019 - 2020 (blue)

		UTG	UGV	UTN	NAK	Small entities
Content	Develop or upgrade values of the Company	Green	Green	Blue	Green	Blue
	Develop values based competency model	Blue	Green	Yellow	Blue	Blue
	Develop strategy	Blue	Green	Yellow	Green	Blue
	Develop goals	Blue	Green	Yellow	Yellow	Blue
Procedures and organi-zational systems	Unification of the structure	Green	Green	Yellow	Blue	Blue
	Grading payment system	Yellow	Green	Green	Green	Yellow
	Performance management system	Yellow	Green	Green	Blue	Blue
	Competence based recruitment process	Blue	Green	Blue	Blue	Blue
	Competence based training and development process	Blue	Green	Blue	Blue	Blue
	Competence based personnel evaluation process	Blue	Green	Blue	Blue	Blue
	Succession planning process	Blue	Blue	Blue	Blue	Blue

Appendix III. Presentation on the status of Naftogaz's transformation (as of April 2019)

Transformation update: what has been delivered

	Business Leader	What was done / presented	Date
Integrated Gas	A.Favorov	• Business plan of Integrated Gas (IG) was approved by the SB • Assets and functions split with Technical BEU preliminary agreed • Head of Gas retail position filled in with external candidate, • Retail rollout strategy preparation launched to be submitted to the EB in May	✓ • Feb 19 ✓ • Apr 19 ✓ • Apr 19 • Ongoing
Oil Mid- & Downstream	M. Gavrylenko	• Business plan of Oil Mid- & Downstream approved by the SB • Changes of organizational structure of headquarter adopted • Internal review of CNG stations is carried out as part of the integration of "Ukravtogaz" to the OMD	✓ • Mar 19 ✓ • Mar 19 • Ongoing
Transmission & Storage	P. Stanczak	• Presentation of Transmission & Storage business plan to the SB • Development and implementation of unbundling roadmap	✓ • Sep 18 • ongoing
Gas Transit	Y.Vitrenko	• Presentation of Gazprom Arbitration and Gas Transit strategic considerations to the SB	✓ • Dec 18
Technical	A.Khomenko	• Technical BEU rollout plan in progress to be submitted to the SB in May • Changes of organizational structure of headquarter was adopted • Asset and functions split with Integrated Gas agreed • Overview of the drilling and workover equipment, programs, supply& demand launched • UGV service branch overview was launched by technical team • Procurement business processes are being analyzed by Technical BEU team • Divisional regulations in progress	• Ongoing ✓ • Mar 19 ✓ • Mar 19 • Apr 19 • Apr 19 • Ongoing • Ongoing
Finance / IT	(vacancies)	• Head of IT filled in with external candidate • CFO vacancy not filled in • IBM IT Strategy project completed & closed • Group integrated business & financial planning policy in progress	✓ • Feb 19 ✓ • Mar 19 • Aug 19
Corporate Strategy	A.Kobolyev	• Naftogaz Strategy & Transformation discussion with the SB • Consolidate business plan and strategy pending individual business unit plans in progress	✓ • Sep 18 • Aug 19
OHI	A.Kobolyev	• Project with McKinsey completed & closed, extension in discuss (ToR agreed)	✓ • Mar 19
Processes	n\a	• Draft of Group business processes repository in progress	• Ongoing

Transformation update: key things outstanding and next steps

Business plan approvals	• Strategic documents for other BUs and initiatives: • Technical – in May 2019 • Gas Supply to HHs - in May 2019? • Renewables – in May 2019? • Should SB approve BPs of Transmission & Storage and Transit? • Consolidated business plan shall be developed y the Strategy team. Suggest to submit it to the SB in August 2019.
Business unit org and processes	• Renewables BDU to be established in May 2019 • Do we consider the option of establishing T&S BDU (from which TSO will be unbundled) **OR** do we consider the option of including SSO into IG? • Detailing of the responsibility/assets split and update of the processes will have to be done to ensure smooth transition to the new operating model by Mid May 2019 • Governance/BUs operating model (authority, empowerment) framework must be developed and approved
Key positions search	• Naftogaz is in active search of candidates for key roles. What is the current status and target timing? • Shall we further engage McK for this?
McK/other advisors	• Do we plan to engage McK for the next phase? Consider opportunity to do an open tender
PMO	• TO suggests establishing centralized Group PMO + Procure software (Microsoft package)
Internal communication	• Comprehensive town hall schedule and communication plan to be revised by the CEO and his team in April – May 2019
Performance management	• Preparation for introduction of the performance management for Naftogaz Group should be kicked off
Internal review	• Status of the ongoing review by Market research unit • Anticipated role of the Y.Vitrenko in Transformation

Appendix IV. Naftogaz's business performance indicators

Financial performance

	13	14	15	16	17	18	1Q 19
Operating profit/(loss), USD bn	(0,9)	(2,6)	(0,3)	1,1	2,3	1,0	1,0
NOPLAT, USD bn	(0,7)	(2,6)	0,1	1,2	1,6	1,4	0,8
Net profit/(loss), USD bn	(2,3)	(7,4)	(1,6)	0,7	1,5	0,4	0,7
ROIC, %	n.a	n.a	n.a	2,8	3,5	3,1	7,5
CAPEX, USD bn	0,5	0,3	0,3	0,4	0,6	1,1	0,4
Balance of contractual indebtedness w/ Gazprom, USD bn (end-of-period)	(21,9)	(31,4)	(36,8)	(45,5)	(2,0)	2,7	2,8
Trade receivables gross, USD bn	4,1	2,2	2,2	3,2	3,9	4,9	5,4
Debt / Operating cash flows	8,3	(1,0)	42,3	1,5	0,8	0,8	0,6
Premium of Naftogaz' borrowing rate to 5Yr sovereign debt (Eurobonds) rate in USD, %	n/a	n/a	-0,8	-0,3	0,9	-2,6	-0,8
Premium of Naftogaz's borrowing rate to <5Yr sovereign debt (Eurobonds) rate in UAH, %	n/a	n/a	6,9	6,5	5,5	-0,5	0,25
Premium of Naftogaz' borrowing rate to <5Y borrowing rate for local comp. (NBU data) in UAH, %	n/a	n/a	n/a	0,8	0,4	-0,3	0,5
Premium of Naftogaz' borrowing rate to <5Y borrowing rate for local comp. (NBU data) in USD, %	n/a	n/a	n/a	0,8	1,8	0,4	-0,7
Hidden subsidies incl, USD bn:	9,5	6,9	3,9	2,8	2,0	2,4	0,8
Difference in prices	9,5	7,2	3,8	1,5	1,1	1,6	0,4
Non-payments	n.a.	(0,2)	0,2	1,1	0,3	0,2	0,2
Unauthorized offtakes	-	-	0,0	0,3	0,5	0,5	0,2

5,9% in 1Q'18

Headcount

	13	14	15	16	17	18	1Q19
Headcount (total for Naftogaz Group), kFTE	86,9	80,3	77,3	74,8	71,9	68,4	n/a
Headcount of Ukrnafta, kFTE	27,3	27,1	26,6	24,8	22,9	22,1	n/a

Macro & energy security

	13	14	15	16	17	18	1Q19
Balance of gas transit and gas imports by Naftogaz, USD bn	(2,5)	(4,7)	(2,2)	0,6	0,7	0,5	0,5
Contribution to GDP, %	1,7	-3,2	2,2	5,7	6,5	5,2	8,3
Net transfers to the state budget, USD bn	0,5	(7,9)	(0,2)	1,6	2,0	2,9	0,6
% of the State Budget revenues	1,1	-38,1	-0,8	7,0	7,1	8,6	8,0
% of gas import from EU	8	26	63	100	100	100	100
Domestic fuel products as % of consumption	n/a	n/a	26	25	25	24	n/a

	13	14	15	16	17	18	1Q19
GTS entry capacities on EU border / Ukraine's gas import needs, %	24	86	134	208	164	218	373
Coverage of peak imports w/o Russian gas, % of days of heating season	34	50	100	100	100	100	100

O&G market efficiency

	13	14	15	16	17	18	1Q19
Naftogaz' share in the relevant market for assessing dominance, %	73	84	14	13	12	12	<10
Volume of regulated UA gas market in % of total market	100	100	53	56	58	58	~65
Regulated wholesale gas price in % of market price	14	13	25	65	72	65	78
Spread between Naftogaz' contract price for purchases on Slovakian VTP and NCG price, EUR/MWh	n/a	4,7	1,5	1,6	1,1	0,9	0,4
Subsidy recipients as % of total number of households (as of March each year)	n/a	n/a	n/a	34	44	44	26
RSCs for households, % of payments for gas sold by Naftogaz[1]	82	79	88	64	60	55	15
MHEs (w/o "unauthorized offtakes"), % of payments for gas supplied[1]	40	62	76	61	61	54	26
Industrial consumers (incl. supplies under PSO), % of payments for gas supplied[1]	89	86	84	66	86	83	n/a
DSO tech needs (w/o "unauthorized offtakes"), % of payments for gas supplied[1]	79	36	29	70	55	85	n/a

Exploration

	13	14	15	16	17	18	1Q19
Total number of licenses held	178	188	178	188	185	189	190
Total new licenses received	1P	8P+ 9E	4E	3P+ 13E	3P+ 5E	1E+2 UC[2]	1
Total number of greenfield licenses	54	57	48	57	50	51	52

1. Payments received by Naftogaz from its counterparties during relevant period in % of monetary value of gas sold/supplied in the same period.
2. UC – uncommercial scientific permit.

	13	14	15	16	17	18	1Q19
Volume of 2D seismic works, km	75	65	485	664	555	607	172
Volume of 3D seismic works, km^2	117	243	529	464	524	1907	406
Number of fields covered by 2D seismic works, per year	1	0	1	3	2	1	1
Number of fields covered by 3D seismic works, per year	0	1	1	5	5	12	1
Reserve replacement ratio (RRR),%	n.a	n.a	n.a	n.a	(20)	87	n/a
2P Reserves UGV, bcm	n.a	291	n.a	n.a	266	264	n/a
3P Reserves UGV, bcm	n.a	304	n.a	n.a	306	302	n/a

O&G production

	13	14	15	16	17	18	1Q19
Gross gas production by UGV, bcm	15,1	15,1	14,5	14,6	15,3	15,5	3,87
% of JAA	7,3	7,2	7,8	6,6	3,3	1,2	0,2
Commodity gas volume, bcm	13,4	13,4	12,8	13,0	13,9	13,8	3,42
Technical needs and own consumption by UGV, bcm	0,6	0,6	0,6	0,6	0,9	1,4	0,45
Full opex (incl. royalty and D&A), USD/ tcm	30	28	55	95	77	90	111
Total opex (excl. royalty), USD/ tcm	20	20	15	22	25	36	51
Cash opex (excl. royalty and D&A), USD/ tcm	10	8	6	7	10	15	18
New wells commissioned[1], #	51	49	50	51	54	64	20
Initial production rate for new commissioned wells, tcm / day	n.a	n.a	27	31	58	46	53,8
Natural decline rate including accidents to previous year gross production, %	n.a	n.a	n.a	6	8	8,9	8,4[2]
Production of liquids by UGV, mt	646	535	514	451	469	446	116

1. New wells commissioned include only successful wells with commercial production rates. In 2017 there were 6 dry wells liquidated, while there have been 2 dry wells drilled in H1 2018.
2. Annualized (based on 2,1% decline rate in 1Q'19).

Field services

	13	14	15	16	17	18	1Q19
Number of rigs, eop	n.a	n.a	n.a	71	69	69	65
Number of partially modernized rigs, eop	n.a	n.a	n.a	n.a	n.a	14	32
Drill rig speed (insource), m/day	n.a	n.a	259	320	394	429	462
Drill rig speed (outsource), m/day	n.a	n.a	n.a	n.a	49,6	36	40,8
Number of WO operations[1],	n.a	n.a	177	233	110	157	41
Number of HF operations[2],	n.a	n.a	-	16	101	173	46
Number of CT operations[3],	n.a	n.a	4	141	578	729	159
New wells commissioned	51	49	50	51	54	64	20
Drilling volume (insource), km	n.a	n.a	173	198	243	245	53
Drilling volume (outsource), km	n.a	n.a	n.a	n.a	8	67	29
Average own fleet drilling cost, USD/meter	n.a	n.a	n.a	0,7	0,8	0,96	1,6/ 2,5**
Average drill contractor day rate (ex VAT, incl. fuel)[4], USD/day	n.a	n.a	n.a	n.a	n.a	55	55

Gas commercial

	13	14	15	16	17	18	1Q19
Sales to RSCs for residential consumers, bcm	16,8	15,1	11,3	11,9	11,3	10,6	4,2
Supply to MHE, bcm	10,2	8,6	7,0	6,8	5,5	6,0	3,2
Supply to other consumers (excl. gas for balancing services), bcm	7,9	8,3	5,0	2,9	2,3	3,4	1,6
Unauthorized offtakes, bcm	n/a	n/a	~0,0	0,9	1,8	1,5	~0.6
Regulated wholesale gas price in % of market price, %	14	13	25	65	72	65	78

% of payments for gas supplied in that period (as of end of each period)

	13	14	15	16	17	18	1Q19
RSCs for households	82	79	88	64	60	55	15
MHEs (w/o "unauthorized offtakes")	40	62	76	61	61	54	26
Industrial consumers (incl. supplies under PSO)	89	86	84	66	86	83	n/a
DSO tech needs (w/o "unauthorized offtakes")	79	36	29	70	55	85	n/a

Note: Number of WO, CT and HF operations include both insource and outsource operations.
1. Includes WO operations both for production increase and support (130 production increase and 50 support WO operations in 2017). 2. Shows number of HF operations. On average 1.5 HF operations are done per well. 3. Includes coil-tubing operations both for production increase and support (335 production increase operations and 243 support operations in 2017). 4. Average rate for 15 tendered lots of 6 wells each lot. ** - inhouse drilling price: 1,6 - old inhouse rigs, 2,5 – brand-new inhouse rigs

***NG's UA market share to non-residential consumers** (excl. unauthorized offtakes)*

	13	14	15	16	17	18	1Q' 19	Apr' 19
Non-residential central heating & Industry	27	39	29	19	13	26	n/a	n/a
Budget organizations	100	100	64	15	5	3	n/a	n/a
DSO tech needs	100	100	78	13	8	4	n/a	n/a
TSO & SSO tech needs	86	100	100	100	74	78	n/a	n/a
Non-PSO consumption (incl UTG needs)	n/a	n/a	n/a	35	29	20	37	3
Non-PSO consumption (excl UTG needs)	n/a	n/a	n/a	27	5	7	6	4

Gas transit, transmission, storage

Gas transit, transmission

	13	14	15	16	17	18	1Q19
Gas transit volume, bcm	86,1	62,2	67,1	82,2	93,5	86,8	21,2
Domestic transmission volumes, bcm	44,2	38,2	30,3	29,3	27,5	27,8	11,1
Average annual utilization of exit capacities of GTS in the West, %	58	42	45	56	63	59	57

Gas storage

	13	14	15	16	17	18	1Q19
Total storage nominal capacity, bcm	31	30	30	30	30	30	30
Cushion gas injected, bcm	n/a	15,1	15,1	15,1	15,1	15,1	15,1
WG used as cushion gas, bcm	n/a	4,6	4,6	4,6	4,6	4,6	4,6
Storage utilization rate, %	39	36	27	24	26	34	17

Oil transit, transmission, storage

	13	14	15	16	17	18	1Q19
Oil transit volume, mt	15,6	15,0	15,2	13,8	13,9	13,3	3,4
Domestic transmission volume, mt	2,0	1,9	1,6	1,4	2,1	2,0	0,5
Oil storage capacity, km3	608	603	473	545	542	542	542

	13	14	15	16	17	18	1Q19
OPEX / Volume-Length, USD / k t-km	29,4	13,4	9,8	9,2	12,6	11,5	10,6
FTE / Total Length, #	0,98	0,93	0,90	0,95	0,95	0,82	0,79
FTE / Nominal throughput x Length, #	8,6	8,2	7,9	8,3	8,3	7,2	6,9
Utilization rate, %	28	27	27	25	25	24	24
CAPEX / Volume x Length, USD / k t-km	1,81	0,55	1,00	1,54	0,62	2,21	13,3

Oil refinery & distribution

	13	14	15	16	17	18	1Q19
Share in domestic refining, %	17	23	21	19	18	18	18
Refining capacity, mt/year	0,6	0,6	0,6	0,6	0,6	0,6	0,6
Refinery utilization rate, %	97	80	79	86	86	80	86
Refinery throughput, k t	584	481	473	515	510	481	130
Share of motor fuel products, %	77	68	61	55	48	48	47
Share of other than motor fuel products, %	18	26	34	39	46	44	46
Energy intensity, toe / kt	n/a	n/a	n/a	n/a	245	261	291
Labor intensity, FTE / kt	n/a	n/a	n/a	n/a	0,9	0,9	0,8
Light products yield, %	84	83	83	84	86	86	86
Number of fuel stations, #	100	100	100	100	100	100	100

Appendix V. Letter from Ukravtogaz regarding interruptions in sales in Q1'18

Національна акціонерна компанія
"Нафтогаз України"
ДОЧІРНЄ ПІДПРИЄМСТВО
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(044) 291 28 78
e-mail: main@ukravtogaz.com

ДОЧІРНЄ ПІДПРИЄМСТВО
УКРАВТОГАЗ

National joint-stock company
"Naftogas of Ukraine"
AFFILIATED COMPANY
"UKRAVTOGAS"
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Р/р 26004010043221 АТ «Укрексімбанк» м.Києва, МФО 322313, ЄДРПОУ 36265925

05.02.18р № 396-01/13.1 На №________ від ________

**Голові правління
Національної акціонерної
компанії «Нафтогаз України»
Коболєву А.В.**

Щодо зупинок АГНКС

Шановний Андрію Володимировичу!

Дочірнє підприємство «УКРАВТОГАЗ» Національної акціонерної компанії «Нафтогаз України» (Підприємство) для виробництва стисненого природного газу на АГНКС Підприємства у якості сировини використовує природний газ, який надходить до АГНКС через газотранспортну та газорозподільні системи України.

Станом на початок лютого 2018 року на наступних АГНКС Підприємства:

- АГНКС-2 м. Вінниця – ПАТ «Вінницягаз»;
- АГНКС-1, 2 м. Суми – ПАТ «Сумигаз»;
- АГНКС м. Чернівці – ПАТ «Чернівцігаз»;
- АГНКС-1 м. Дніпро – ПАТ «Дніпрогаз»;
- АГНКС м. Кам'янське – ПАТ «Дніпропетровськгаз»;
- АГНКС-1, 2 м. Запоріжжя – ПАТ «Запоріжгаз»;
- АГНКС м. Кривий Ріг – ПАТ «Криворіжгаз»,

не ведеться відпуск СПГ з причини не повного приведення комерційних вузлів обліку газу (ВОГ), що належать Підприємству, до вимог ДСТУ ГОСТ 8.586.1…5:2009 (ИСО 5167-1:2003). На даний час більшість комерційних ВОГ, що належать Підприємству та ведуть облік переданого від Операторів ГРМ природного газу, не приведені у відповідність до вимог ДСТУ в частині 7 «Вимоги до вимірювального трубопроводу та його облаштування».

Дані комерційні ВОГ пройшли відповідну державну повірку та працюють в границях допустимої похибки, встановленої для комерційних ВОГ у відповідності до ДСТУ ГОСТ 8.586.1:2009 (ИСО 5167-1:2003), у зв'язку із чим Оператори ГРМ протягом 2017 року при визначенні обсягів спожитого природного газу враховували показники даних ВОГ.

З початком 2018 року деякі з Операторів ГРМ (ПАТ «Сумигаз», ПАТ «Чернівцігаз», ПАТ «Вінницягаз») повідомили про свій намір здійснювати нарахування обсягу спожитого природного газу за проектною номінальною

потужністю неопломбованого газового обладнання на АГНКС з урахуванням кількості годин роботи такого обладнання, деякі ж з Операторів ГРМ (ПАТ «Дніпрогаз», ПАТ «Дніпропетровськгаз», ПАТ «Запоріжгаз») самостійно обмежили надходження природного газу на АГНКС Підприємства, ВОГ яких не відповідають вимогам ДСТУ ГОСТ 8.586.1:2009 (ИСО 5167-1:2003), що є неприпустимим для Підприємства.

Підприємство вживає всіх можливих заходів для недопущення зменшення рівня реалізації СПГ: проводиться перерозподіл споживачів СПГ на інші АГНКС Підприємства в межах одного міста (району), організовується реалізація СПГ за допомогою ПАГЗ.

Приведення ВОГ у повну відповідність до вимог ДСТУ ГОСТ 8.586.1…5:2009 (ИСО 5167-1:2003) є одним з першочергових завдань Підприємства, вживаються невідкладні заходи для приведення ВОГ у відповідність до вказаного ДСТУ (додаток 1). Орієнтовна загальна вартість виконання робіт по приведенню комерційних ВОГ, які встановлені на межі балансової належності з Операторами ГРМ, становить близько 5 млн. грн., фінансування можливо здійснити тільки за рахунок наповнення статутного капіталу Підприємства.

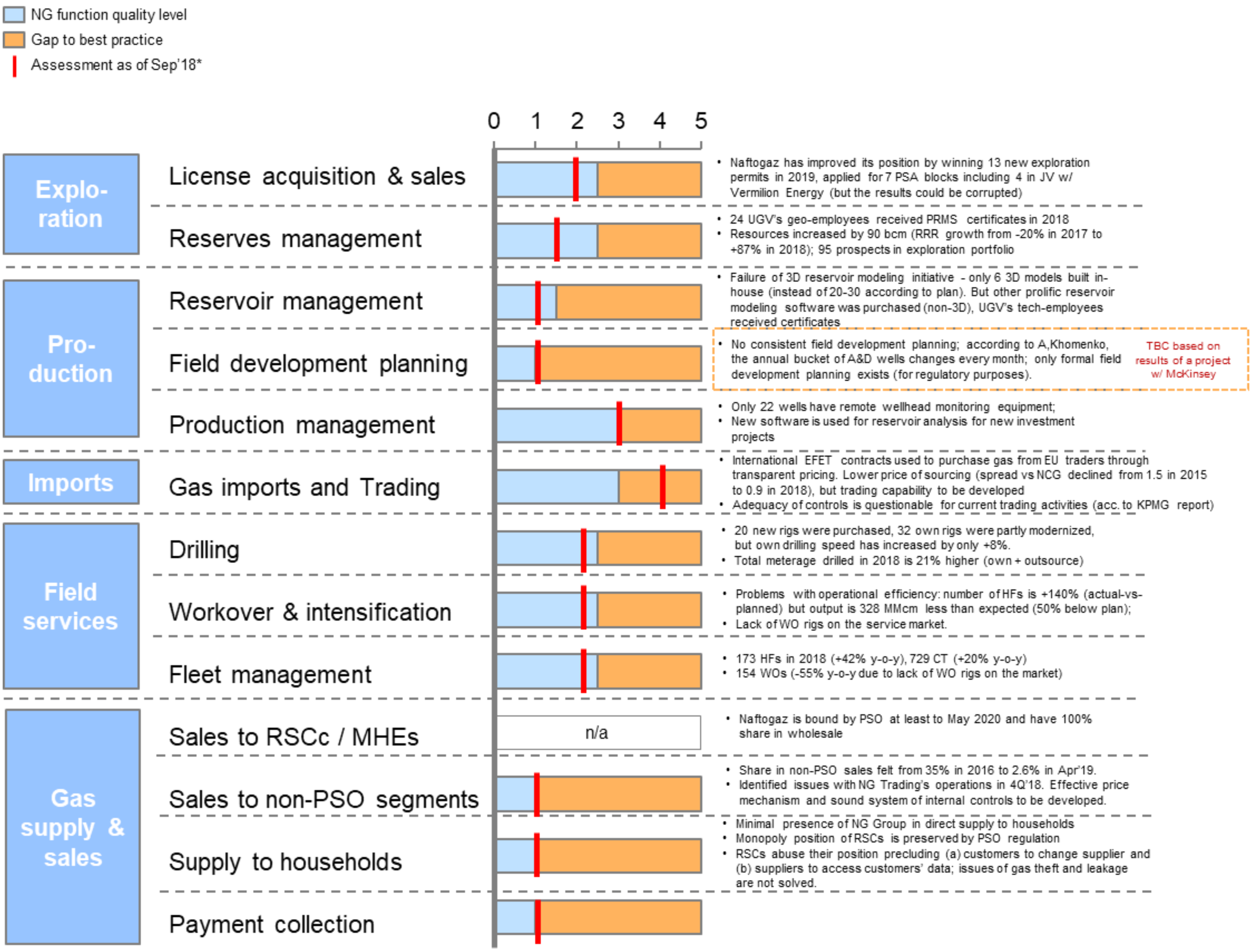
Просимо розглянути питання додаткового наповнення статутного капіталу Підприємства на суму 4 508,35 тис. грн. з подальшим їх використанням на приведення ВОГ у повну відповідність до вимог ДСТУ ГОСТ 8.586.1…5:2009 (ИСО 5167-1:2003), що забезпечить повноцінне функціонування АГНКС Підприємства.

Додаток 1. Перелік Комерційних ВОГ Підприємства

Директор **В.В. Свірін**

Вик. Лаврик В.Є.
тел. 291-28-40

Appendix VI. Assessment of selected Naftogaz's principle activities in comparison with leading practices



* - with upward adjustments in License acquisition & sales (+1), Reserves management (+0,5)



* - with upward adjustments in Operations & maintenance of Gas transmission (+1) and Wholesale fuel products sales (+1)

Appendix VII. Assessment of selected Naftogaz's corporate functions in comparison with leading practices

